

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
LUFKIN DIVISION

PERSONAL AUDIO, LLC		DOCKET 9:09CV111
		JULY 1, 2011
VS.		8:23 A.M.
APPLE, INC., ET AL		BEAUMONT, TEXAS

VOLUME 7 OF ___, PAGES 2072 THROUGH 2266

REPORTER'S TRANSCRIPT OF JURY TRIAL

BEFORE THE HONORABLE RON CLARK
UNITED STATES DISTRICT JUDGE, AND A JURY

APPEARANCES:

FOR THE PLAINTIFF:	RONALD J. SCHUTZ
	JACOB M. HOLDREITH
	CYRUS A. MORTON
	ROBINS KAPLAN MILLER & CIRESI - MN
	800 LASALLE AVENUE
	SUITE 2800
	MINNEAPOLIS, MINNESOTA 55402
	ANNIE HUANG
	ROBINS KAPLAN MILLER & CIRESI - NY
	601 LEXINGTON AVENUE
	SUITE 3400
	NEW YORK, NEW YORK 10022
	LAWRENCE LOUIS GERMER
	GERMER GERTZ
	550 FANNIN
	SUITE 400
	BEAUMONT, TEXAS 77701

1 FOR THE DEFENDANTS: RUFFIN B. CORDELL
2 FISH & RICHARDSON - WASHINGTON DC
3 1425 K STREET NW
4 SUITE 1100
5 WASHINGTON, DC 20005
6
7 GARLAND T. STEPHENS
8 BENJAMIN C. ELACQUA
9 FISH & RICHARDSON
10 1221 MCKINNEY
11 28TH FLOOR
12 HOUSTON, TEXAS 77010
13
14 KELLY C. HUNSAKER
15 FISH & RICHARDSON
16 500 ARGUELLO STREET
17 SUITE 500
18 REDWOOD CITY, CALIFORNIA 94063
19
20 JUSTIN BARNES
21 FISH & RICHARDSON
22 12390 EL CAMINO REAL
23 SAN DIEGO, CALIFORNIA 92130
24
25 J. THAD HEARTFIELD
THE HEARTFIELD LAW FIRM
2195 DOWLEN ROAD
BEAUMONT, TEXAS 77706

COURT REPORTER: CHRISTINA L. BICKHAM, CRR, RMR
FEDERAL OFFICIAL REPORTER
300 WILLOW, SUITE 221
BEAUMONT, TEXAS 77701

PROCEEDINGS REPORTED USING COMPUTERIZED STENOTYPE;
TRANSCRIPT PRODUCED VIA COMPUTER-AIDED TRANSCRIPTION.

INDEX

PAGE

CONTINUED DIRECT EXAM OF STEPHEN WICKER

2081

CONCORDANCE INDEX

2242

INDEX OF EXHIBITS

Plaintiff's Exhibit 88

2085

Plaintiff's Exhibit 1

2093

Plaintiff's Exhibit 1

2099

Plaintiff's Exhibit 1

2119

Plaintiff's Exhibit 2

2141

Plaintiff's Exhibit 2

2223

Defendant's Exhibit 30

2079

Defendant's Exhibit 2

2079

Defendant's Exhibit 427

2106

Defendant's Exhibit 42

2122

Defendant's Exhibit 176

2124

Defendant's Exhibit 103

2128

Defendant's Exhibit 97

2128

Defendant's Exhibit 1

2140

Defendant's Exhibit 1

2142

Defendant's Exhibit 1

2146

Defendant's Exhibit 1

2147

Defendant's Exhibit 1

2151

2075

1	Defendant's Exhibit 1	2153
2	Defendant's Exhibit 1	2154
3	Defendant's Exhibit 1	2156
4	Defendant's Exhibit 1	2161
5	Defendant's Exhibit 1	2163
6	Defendant's Exhibit 3	2176
7	Defendant's Exhibit 3 through 9	2181
8	Defendant's Exhibit 3	2182
9	Defendant's Exhibit 3	2187
10	Defendant's Exhibit 3	2194
11	Defendant's Exhibit 3	2195
12	Defendant's Exhibit 33	2209
13	Defendant's Exhibit 32	2210
14	Defendant's Exhibit 32	2212
15	Defendant's Exhibit 2	2212
16	Defendant's Exhibit 27	2213
17	Defendant's Exhibit 32	2213
18	Defendant's Exhibit 32	2213
19	Defendant's Exhibit 32	2214
20	Defendant's Exhibit 32	2215
21	Defendant's Exhibit 27	2215
22	Defendant's Exhibit 27	2216
23	Defendant's Exhibit 32	2217
24	Defendant's Exhibit 8	2217
25	Defendant's Exhibit 8	2219

1 (REPORTER'S NOTES PERSONAL AUDIO V. APPLE,
2 JURY TRIAL, VOLUME 7, 8:23 A.M., FRIDAY, JULY 1, 2011,
3 BEAUMONT, TEXAS, HON. RON CLARK PRESIDING.)

4 (OPEN COURT, ALL PARTIES PRESENT, JURY NOT
5 PRESENT.)

6 THE COURT: As long as you're here,
7 Mr. Cordell, yesterday you raised some I think maybe
8 20 -- some large number -- I haven't been able to call
9 them up yet -- motions for JMOL; and there certainly is
10 authority for the proposition that one who makes
11 innumerable objections basically has buried whatever good
12 ones are in the mess of all of them.

13 Can you identify for me your top four?

14 MR. CORDELL: Let's see if I can do that on
15 the fly, your Honor. I guess the --

16 THE COURT: Well, I'll let you do it at the
17 next break if you wish. I mean, take a look at them; but
18 what are your top four? Because the idea of objecting I
19 think virtually to almost every claim on almost every
20 basis, almost every claim term and plus damages gets to
21 the point where it's almost, one, not helpful to the
22 court but, two, not in keeping with the spirit of the
23 rule which is to identify deficiencies that could be
24 rectified by the other side if they asked to reopen the
25 case. And basically, based on that range of motions,

1 they would have had to just say, "We need to start over
2 again from the beginning." That's not what the rule is
3 intended to do.

4 As you went through them, it appeared there
5 might have been one or two good ones in there; but it
6 would be arrogant of me to pick out what are your best
7 arguments because you've studied them much more than I
8 have. So, what I'd like at the next break is let me know
9 what your top four are.

10 MR. CORDELL: Absolutely, your Honor. I
11 appreciate that. And recent case law from the Federal
12 Circuit has reminded us all of the necessity to make
13 those Rule 50 motions; so, that's part of our --

14 THE COURT: Right. But by the time it gets to
15 the Federal Circuit, with their briefing rules, you have
16 a limited number of pages; and having sat on two
17 different Court of Appeals, anybody who brings 20 or 30
18 points, there's a lot of laughter in the back room when
19 the judges are there, or grumbling. Any good appellate
20 lawyer will focus on their top ones. And they very well
21 can say that, yes, it's perfectly okay since they're just
22 going to get a few of them. But like I say, there's
23 authority to the contrary; and, so, I'd like to know what
24 your top four are.

25 MR. CORDELL: Absolutely, your Honor. Thank

1 you.

2 THE COURT: Okay. And as to the declaration
3 of Diane Geraci, as I stated yesterday -- I went back and
4 reviewed my notes on the research. It's obvious that a
5 single thesis, such as a doctoral thesis or this thesis,
6 can be sufficient if it is shown to be substantially
7 accessible; and that's the *in re Hall* case, 781 F.2d 897.

8 What this is is an evidentiary problem under
9 Rule 803(6). And actually the new outline of the rules
10 that has been sent forward -- the new rewriting sets out
11 the Requirements A, B, C, D and makes it a little bit
12 easier to read. But the record -- it has to be
13 established by the affidavit that the record was made at
14 or near the time from someone with knowledge. And
15 Mr. Elacqua pointed out to me -- and I think correctly --
16 I had been focusing mostly on Exhibit C, the thesis
17 itself. There were two other attachments which basically
18 were going to be used for the foundation of C.

19 But Ms. Geraci never says either A or B, it
20 was a record made at or near the time from someone with
21 knowledge; and she doesn't say she's someone with
22 knowledge necessarily.

23 She does say they're kept during the regular
24 course of business; but then the third requirement
25 that -- making the record as a regular course of

1 procedure at MIT, that's lacking for Exhibits A and B
2 also. She never says that.

3 She also doesn't say that -- and it might not
4 have been as important since the idea was to bring in
5 Exhibit C, the thesis itself -- that he had knowledge.
6 But there clearly is nothing in there saying that the
7 record -- making that record, that thesis was a part of
8 the regular course of business at MIT unless you read
9 Exhibits A and B to say that. But Exhibits A and B don't
10 get past the hearsay rule. So, on that basis, I'm going
11 to sustain the hearsay objection as to Defendant's
12 Exhibit 30 with Attachments A, B, and C; namely, the
13 catalog listing -- or A is the discussion from the
14 institute of archives and special collections. B is the
15 catalog; and C was the, I think, first page with the
16 attachment of the thesis which is marked separately as
17 Defendant's Exhibit 2. And, so, at this time the ruling
18 that I had in the motion *in limine* will stand; and I've
19 not seen the predicate for that to come in.

20 Okay. Are we ready, then, to start with
21 Dr. Wicker?

22 MR. ELACQUA: Yes, your Honor.

23 THE COURT: We've got the visual all up and
24 ready?

25 DEPUTY CLERK: Yes.

1 THE COURT: All right. As soon as they all
2 show up, bring them on down.

3 Dr. Wicker, you may or may not realize from
4 that ruling I just made; but basically what I'm saying is
5 until there is more predicate, you can't bring in this
6 thesis from the MIT library.

7 THE WITNESS: Yes, your Honor.

8 THE COURT: You don't get to talk about it or
9 mention it or hint at it.

10 THE WITNESS: Yes, sir.

11 MR. HOLDREITH: Your Honor, I'm sure this is
12 made clear to Dr. Wicker; but the other thing that's not
13 in the case obviously is the reexamination proceedings.
14 Those are in the report. I'm sure they won't come up. I
15 just wanted to --

16 THE COURT: Right. We're not talking about
17 reexam at this point.

18 THE WITNESS: Yes, your Honor.

19 (The jury enters the courtroom, 8:34 a.m.)

20 THE COURT: Good morning, ladies and
21 gentlemen. Welcome back.

22 Go ahead, Mr. Elacqua.

23 MR. ELACQUA: Thank you, your Honor.

24 Good morning, ladies and gentlemen.

25 *

1 CONTINUED DIRECT EXAMINATION OF STEPHEN WICKER

2 BY MR. ELACQUA:

3 Q. Dr. Wicker, good morning.

4 A. Good morning.

5 Q. I want to back up just a little bit from what we
6 were talking about yesterday regarding the software
7 method we've been talking about for the last about week
8 and a half. Up on the screen here is a slide, and if you
9 could explain to the jury sort of what we're going to
10 talk about here through this slide.

11 A. Okay. What we're going to talk about here is the
12 database, the Dulcimer database that's stored on the hard
13 drive of all these devices.

14 Q. Okay. And that's the little red dot there on the
15 bottom in the middle; is that right?

16 A. Yes, right here (indicating).

17 Q. Okay. So, what just happened there?

18 A. I accidentally got someone with the pointer.

19 Dulcimer DB is right here (indicating), that
20 is the name of the database that's stored on the hard
21 drive. And I want to note Dulcimer DB is actually stored
22 on all of the accused products. In some cases it's
23 stored in a compressed form.

24 Q. Okay.

25 A. It's used for a slightly different purpose. But

1 it's on all of them.

2 Q. And which product is that that it's stored in a
3 compressed form?

4 A. I believe it's nano Generation 5.

5 Q. Okay. Now, when -- back up just a little bit. I
6 see that the iPod was off there. When it gets turned on,
7 what happens with those arrows and what is happening
8 there?

9 A. Okay. In all but the nano Generation 5, when you
10 turn on one of these devices, the disk spins and it pulls
11 that Dulcimer database slowly out of memory. There are a
12 number of software handlers that do different things, and
13 they take different pieces of that database and build
14 them into RAM. So, for example, it would pull out and
15 build playlists in memory, linking them together so that
16 you can then play your music in the order that you wish
17 to play it.

18 Q. Now, when the iPod goes to actually play a
19 playlist, is it playing from data in the Dulcimer
20 database or is it playing from data in memory?

21 A. No. No. As has been emphasized -- in fact,
22 Mr. Boettcher talked about this quite a lot. You don't
23 want to spin the disk unless you absolutely have to. One
24 of the key features of these devices is that they'll play
25 music for 10, 12 hours. So, we try not -- or Apple tries

1 not to spin the disk unless it absolutely has to.

2 So, the Dulcimer database is slowly unfolded.
3 Bits and pieces are taken out, processed, and put into
4 RAM which you see here. RAM is the very low-power, fast
5 memory that processing units like to work with.

6 Q. Okay.

7 A. It's the most efficient way to do this process.

8 Q. Thank you, Dr. Wicker.

9 Now, when you're actually going through the
10 playlists and you're going from one track to the next, is
11 that going down into what's on the hard drive, the
12 Dulcimer database; or is it going into -- is it using
13 what's in memory?

14 A. The navigation, the manipulation of the playlist
15 is all going on in memory. The only time that the iPods
16 will go back to the hard disk is to pull out more music,
17 not playlists but music. And that's about once every 20
18 minutes.

19 Q. Okay. Now, we've seen this before but just to
20 reacquaint ourselves from yesterday, this is the software
21 method that involves the different steps. And,
22 Dr. Wicker, are all the accused products the same with
23 regard to how they go -- how they're operated from
24 turning it on to skipping through songs and things like
25 that?

1 A. There are some slight differences. As I mentioned
2 before, there is something called a "sequel database."
3 It's a little different way of operating with regard to
4 the Dulcimer database. And, again, that's nano Gen 5
5 that has the sequel.

6 But the essence remains the same. In other
7 words, as you play a playlist, you go from one thing to
8 another. There's no scanning to see if it's appropriate.
9 There's no searching for an appropriate LocType. You
10 simply start at the top and play your way down, unless
11 you put it on shuffle. But that's something we haven't
12 talked about.

13 Q. Now, you were here for Mr. Boettcher's testimony.
14 That's right?

15 A. Yes, I was.

16 Q. And he talked a little bit about how the source
17 code has changed over time through the different
18 generations?

19 A. Yes.

20 Q. Now, is it your understanding that the source code
21 is the same in all of the products?

22 A. No. It's definitely not the same in all the
23 products.

24 Q. Okay. Now --

25 MR. ELACQUA: If we could switch over to the

1 exhibits. And if I could get Plaintiff's Exhibit 88,
2 please.

3 BY MR. ELACQUA:

4 Q. Now, as part of your process, Dr. Wicker, did you
5 rely on any responses from Apple employees?

6 MR. ELACQUA: Page 16, please.

7 MR. HOLDREITH: Your Honor, no objection to
8 the substantive answers in the exhibit; but I understand
9 Mr. Elacqua will redact the portions that are not germane
10 to this discussion.

11 MR. ELACQUA: We're only going to rely on
12 certain pages, your Honor; and we'll make sure it's just
13 those pages.

14 THE COURT: Okay.

15 MR. ELACQUA: If you could blow up there the
16 iPod application on the iPod classic Generation 4.

17 Thank you.

18 BY MR. ELACQUA:

19 Q. I just want to focus on a couple differences with
20 some of the generations. In the second paragraph down,
21 it talks about "application start-up establishes a
22 handler for a collection of transport commands via the
23 View layer."

24 Is this View layer the same throughout all the
25 different products?

1 A. No, it's not.

2 Q. Okay. And this I believe references source code
3 found in means-plus-function MP3 player example script;
4 is that right?

5 A. Yes. That's correct.

6 Q. Okay.

7 MR. ELACQUA: Now let's move to page 27,
8 please. And that's the iPod application on the nano
9 Generation 3. I think maybe Mr. Boettcher talked a
10 little bit about this one. This might have been the one
11 up on the screen.

12 BY MR. ELACQUA:

13 Q. Now, on the second paragraph down, this talks
14 about a different View layer. What is that describing?

15 A. Okay. So, this is a different View layer. What
16 it's talking about is how the elements within the View
17 layer respond to next/fast-forward releases.

18 Basically what that means is when you
19 release -- here's a particular iPod. I don't believe
20 this is -- this isn't a nano Gen 3; but when you touch a
21 button and release, that's when the software actuates.
22 And, so, what this is describing is how that software is
23 invoked by releasing a button, in this particular case,
24 the next or fast-forward button.

25 THE COURT: Excuse me just a minute.

1 Was this one of the interrogatory answers that
2 came in earlier or --

3 MR. ELACQUA: Yes, your Honor.

4 THE COURT: It has? Did you use it --

5 MR. HOLDREITH: No.

6 THE COURT: -- before or not?

7 MR. HOLDREITH: We have not offered this
8 exhibit.

9 THE COURT: Okay. But it is one of your
10 exhibits, and you're not objecting to it --

11 MR. HOLDREITH: Provided the portions that are
12 not germane are redacted and --

13 MR. ELACQUA: I believe a redacted version
14 might have been in earlier.

15 THE COURT: What we're talking about, ladies
16 and gentlemen, these interrogatories and admissions and
17 things will have usually pages and pages of objections
18 from the lawyers, remarks, other things that have nothing
19 to do with the case; and I just want to be sure -- I've
20 told the lawyers that I want all of that cut out. You've
21 got enough to deal with to not have to handle all of
22 that. So, it's not that I'm trying to hide anything from
23 you; but you can see all these files everywhere. You
24 don't need all of them back in the jury room. I can tell
25 you. You need the ones that are important to the case.

1 Go ahead, counsel.

2 MR. ELACQUA: Thank you, your Honor.

3 If we could go back to the slides for a
4 minute, please.

5 Thank you.

6 BY MR. ELACQUA:

7 Q. I think we've already talked a little bit about
8 this. Another product with some differences is the nano
9 fifth generation?

10 A. That's correct.

11 Q. You said there is a compressed Dulcimer database
12 stored on the hard drive there; is that right?

13 A. That's right.

14 Q. Is that used during any playback?

15 A. No. What happened with the fifth generation is
16 they built a new kind of database, something called the
17 "sequel database," SQL; and I believe Mr. Boettcher
18 talked about that. Well, they kept the old Dulcimer
19 database as a way for the *iTunes* -- the computer running
20 the *iTunes* to know what had to be synchronized and what
21 could be deleted. But the iPod itself doesn't use the
22 Dulcimer anymore, at least in Generation 5.

23 So, what *iTunes* does is it creates the
24 Dulcimer database and then stores it in compressed form
25 on the iPod, the nano Gen 5, and then it's never used, at

1 least by the iPod.

2 The next time you hook the iPod up, *iTunes*
3 will go and find that compressed Dulcimer database and
4 then use it. So, basically to summarize, *iTunes* likes to
5 see it; but the iPod doesn't use it.

6 Q. Okay. And that --

7 A. It just sits there.

8 Q. And that's just the nano fifth generation; is that
9 right?

10 A. That's correct.

11 Q. Okay. Now, do you have an opinion, Dr. Wicker, as
12 to whether this method regarding all these different
13 steps with Selection_Records, LocType, and the scanning
14 are present in the accused products?

15 A. I do have an opinion. They are definitely not
16 present.

17 Q. And how about under equivalents? Are they present
18 under equivalents?

19 A. I can't see anything that would be equivalent to
20 what's called for in the claim construction.

21 Q. Okay. Now, again, to remind the jury, we're
22 talking about the '076 and the '178 patent. Let's talk
23 about the '076 first. If they're not there literally
24 under equivalents, what does that mean?

25 A. Okay. If they're not there -- for example, the

1 fourth and the fifth -- excuse me -- the fourth and the
2 sixth limitations of claim 1, since these limitations
3 aren't satisfied, claim 1 of the '076 patent is not
4 infringed.

5 Q. Now, that's the claims up there. I think we also
6 talked about the '178. What's the effect on the '178?

7 A. Okay. With regard to the '178, I've shown that
8 the fifth element of claim 1 is not present. The first
9 element of claim 6 and the sixth element of claim 14,
10 element F, is not present. If an element is not present,
11 the claim can't be infringed.

12 So, what I've shown you is that claims 1, 6,
13 and 14 of the '178 patent are not infringed by the
14 accused products.

15 Q. Now, in talking about the '076 and the '178, you
16 said they're not there under the equivalents. What are
17 some of the differences, and why are they substantial?

18 A. Well, the differences are substantial, in part,
19 because what's called for in the patent is the ability to
20 scan forward and to find something of a particular type,
21 a particular subject, a particular topic, a particular
22 kind of program. These devices simply don't do that.
23 They just play one thing after another. And in my mind
24 that's a big difference.

25 You heard Mr. Call talk about how that very

1 intricate interaction scanning for LocType works. It's a
2 very powerful process. These devices simply don't do
3 that. They simply play one thing after another. I think
4 that's a substantial difference.

5 Q. Okay. Let's talk next about another limitation in
6 the '076 and the '178 patent. Explain for the jury,
7 please, what the last Selection_Record limitation there
8 involves.

9 A. Okay. The last Selection_Record has to do with
10 continuously playing. You hit the bottom of the
11 Selection_Record. You go back to the top, and you just
12 keep going. You go in a big continuous loop. And this
13 is how the patent says it's to be -- how you implement
14 this particular feature. It's through a means for
15 continuously reproducing or, in the '178 patent, the
16 fifth limitation, a processor for continuously
17 delivering.

18 Basically the way this is done, according to
19 the claim construction, is through something called the
20 "last Selection_Record." It's a particular
21 Selection_Record that's at the bottom of the sequence
22 file that says -- through its LocType it says, "Go back
23 to the top and start all over again."

24 Q. Okay.

25 MR. ELACQUA: And for the record, we're

1 talking about the '076 patent, claim 1D and the '178
2 that's claim 1E.

3 BY MR. ELACQUA:

4 Q. Let's look at the Figure 5 here and a callout from
5 the '076 patent. Explain for the jury, please, what
6 we're looking at here.

7 A. Okay. What I'm showing here is a portion -- I
8 believe it's Figure 3. And what we're seeing here is
9 (reading) the end of the selections file 351 is marked
10 with an R Selection_Record 380.

11 So, if you could blow this up, it might be a
12 little easier to see. I think it's not "blow-upable."

13 Q. Is that Figure 5?

14 A. Oh, Figure 5. I'm sorry. I misspoke.

15 Q. We can do that.

16 MR. ELACQUA: Thank you, Mr. Barnes.

17 A. Yeah. You can see right there it says "Figure 5."

18 Okay. So, this last Selection_Record is right
19 here (indicating). It's an R record. That's the LocType
20 that tells us this is a Selection_Record that causes us
21 to go all the way back to the top, to just under this R
22 record (indicating).

23 So, we go back to this first Selection_Record
24 that's associated with this ProgramID. So, basically the
25 last Selection_Record sends us back to the top. That's

1 how we continuously reproduce. You never stop just
2 because you hit the bottom. You keep going and going.

3 BY MR. ELACQUA:

4 Q. Now, on Figure 5, the reference on the bottom, is
5 that 380?

6 A. Yes. That 380 is the number that was referenced
7 in the cite from the patent that was on top of the
8 previous slide.

9 Q. Okay.

10 MR. ELACQUA: If we could go back to the
11 slides, please, Mr. Barnes.

12 Thank you.

13 And I believe the cite, for the record, is
14 column 35 at lines 40 through 42 of Plaintiff's
15 Exhibit 1.

16 BY MR. ELACQUA:

17 Q. Let's keep moving, and let's talk now about what's
18 been accused here. Okay? Can you explain for the jury
19 what we're going to see here?

20 A. Okay. So, this is a playlist and actually will be
21 roughly the same for all the accused devices. It's a
22 listing of songs, and this happens to be Nineties music.
23 There's five entries. And, so, this is what would be in
24 RAM in that fast memory on one of these devices.

25 Now, there are a number of ways you can play

1 this; and it's all under the user's control. The user
2 makes this choice by making a selection on the iPod,
3 whether it will play from beginning to end and stop --
4 and I think -- let's see. I'll need my glasses for that.

5 Okay. Okay. So, if you'll look right here
6 (indicating), it's kind of hard to read; but it says
7 "play current playlist once." Okay. The user of the
8 iPod has made this selection; and, so, when the playlist
9 is played, we'll start with "Building Bridges," go down
10 to "Amanda" and then it's just going to stop.

11 MR. ELACQUA: I just wanted to note this is
12 DDX 424, for the record, we're looking at.

13 BY MR. ELACQUA:

14 Q. On the top left there where it says "off," is that
15 something that's the -- is that something that comes out
16 of the box as default or is that something that the user
17 has to turn off?

18 A. Okay. This is the way it comes out of the box.
19 The default -- I think Mr. Boettcher opened up a box and
20 had an iPod in it. Were he to actually go and have
21 *iTunes* play a playlist on it, this would initially be set
22 to "off." That's simply the way it comes out of the box.
23 There are no playlists on the device when it comes out of
24 the box; but if he put one on, it would initially be
25 "repeat off." So, it would play once and then stop.

1 Q. Okay. So, these are some of the user settings
2 then.

3 Let's look at what another setting is. What's
4 this next setting we're looking at?

5 A. Okay. This next setting is one of the repeat
6 settings. And, so, right here it says "repeat current
7 song." So, what's going to happen now, you'll start with
8 "Building Bridges." And "Building Bridges" will play
9 over and over and over again. That's all that will
10 happen forever until you stop -- well, until it runs out
11 of batteries.

12 Q. Okay. What about this last setting here? It says
13 "repeat all."

14 MR. ELACQUA: I guess, Mr. Barnes, if you
15 could blow that up again real quick.

16 No? Okay. That's all right.

17 A. That's okay. I can see it on my screen. What it
18 says here is "repeat current playlist." So, what's going
19 to happen with this third setting is we'll go from
20 "Building Bridges" down to "Amanda" and then we'll go
21 back to the top and start over again.

22 BY MR. ELACQUA:

23 Q. So, Dr. Wicker, does this "repeat all" setting --
24 does this store some sort of record in the playlist?

25 A. No. The repeat, whether it's "repeat song" or

1 "repeat all," it's the user that makes that choice. It's
2 not part of the playlist. The playlist can be played at
3 least three different ways.

4 Q. Okay. Now, Dr. Wicker, what's your opinion with
5 respect to this last Selection_Record and compared to how
6 the accused products work?

7 A. The last Selection_Record is simply not there.

8 Q. Is that -- what's your opinion with respect to
9 whether it's not there identically or under the
10 equivalents?

11 A. Well, certainly identically, it's not there. It's
12 simply not there.

13 With regard to equivalents, I believe this is
14 a substantial difference because if we look at Figure 5
15 in the patent, what happens is we have this one fixed
16 choice. You start at the top, you go down to the bottom,
17 and then you repeat and you repeat. It's part of the
18 Selection_Record. You can't take it out; you can't
19 change it using the player.

20 Whereas, here the playlist doesn't have any
21 such thing; but we've got all kinds of options. We can
22 not repeat. We can repeat the song. We can repeat the
23 whole playlist. I think that's substantially different.

24 Q. Okay. So, here again are the limitations we're
25 talking about from the '076 patent and the '178 patent;

1 and, Dr. Wicker, what's your opinion with respect to
2 these limitations?

3 A. Okay. Well, these limitations, as I've shown, are
4 not present, whether literally or as an equivalent.
5 There is no identical structure, nor is there an
6 equivalent structure.

7 Since these limitations aren't met, claim 1 of
8 the '076 and claim 1 of the '178 are not infringed, nor
9 are any of the dependent claims.

10 Q. And does that differ across any of the products
11 we've been talking about, the different groupings or any
12 of the other -- any of the products?

13 A. Well, the software may vary across all of these
14 products; but none of them have a last Selection_Record
15 or anything like it in their playlist.

16 Q. Okay. Dr. Wicker, let's talk about the next
17 question that we previewed yesterday. Explain for the
18 jury what we're going to talk about in this next section.

19 A. Okay. A number of the asserted claims require the
20 ability to download from a server. There is a portion of
21 the claims that literally says download -- and I'm
22 paraphrasing -- download music and/or a playlist from a
23 server. That download request has a particular
24 construction according to the court. It requires that
25 the player request something from the server.

1 Q. Okay. Well, let's talk first about what claims
2 we're talking about. Does this come up in both patents
3 or just one of the patents?

4 A. I believe it's primarily one patent, the
5 '178 patent.

6 Q. Okay. And this is claim 1 of the '178 patent; is
7 that right?

8 A. That's correct.

9 Q. Okay. And does it also show up in another claim
10 in the '178 patent?

11 A. Yes. In fact, there is the specific word
12 "downloading" right there (indicating). This is claim 14
13 of the '178 patent.

14 Q. Okay. What are we looking at here? And if you
15 could explain for the jury what these sections of the
16 patent talk about.

17 A. Okay. These portions of the patent are part of or
18 at least underlay the claim construction that said that
19 there has to be a request. What we see here are a number
20 of places in the patent where the request comes from the
21 player.

22 "In response to requests from the player
23 103" -- I'm reading from Column 5, lines 47 to 53.

24 And then Column 6, 51 to 53, receiving a
25 request from the player.

1 Column 7, lines 10 through 13, talks about the
2 player issues download requests.

3 It simply makes it clear that when you're
4 talking about downloading, there has to be a request from
5 the player.

6 MR. ELACQUA: And for the record, those cites
7 come from Plaintiff's Exhibit 1, the '076 patent.

8 BY MR. ELACQUA:

9 Q. You mentioned before the court has a specific
10 definition for the downloading from the server. Explain
11 for the jury, please, the definition and what we're going
12 to talk about.

13 A. Okay. This is a portion of the court's claim
14 construction, and I note it's in the jury notebook at
15 page 9.

16 On the left you see the claim language,
17 "downloading a plurality of separate digital compressed
18 audio program files and a separate sequencing file from
19 one or more server computers."

20 And on the right we have the definition.
21 Basically what it requires is "transferring a plurality
22 of separate digital compressed audio program files and a
23 separate sequencing file from the memory of one or more
24 separate computers to the memory of the player" -- and
25 then we get the language that I've highlighted -- "upon a

1 request by the player. Request means a communication to
2 initiate the transfer."

3 Q. Okay. Now, Dr. Wicker, I think we're looking at
4 Figure 1 of the patent here; is that right?

5 A. That's right.

6 Q. And I think we've brought a board of Figure 1.

7 MR. ELACQUA: Your Honor, can Dr. Wicker step
8 down to the well to explain Figure 1?

9 THE COURT: You may. Please just remember to
10 keep your voice up when you're away from the microphone.

11 THE WITNESS: Yes, your Honor.

12 BY MR. ELACQUA:

13 Q. Dr. Wicker, Figure 1 comes from the patent; is
14 that right?

15 A. Yes, it does. And you can see that right here
16 (indicating). It's the first of the figures that are at
17 the very beginning of the patent.

18 Q. Okay. Can you explain for the jury sort of just
19 the layout as to what we're looking at regarding this
20 idea of downloading via request from a player to a
21 server?

22 A. Yes. I know when I first looked at this, I
23 thought it was dreadfully confusing. There are lots of
24 parts and lots of numbers.

25 But actually there are three main parts to

1 this. There is a player -- and it's helpful that we've
2 got a -- (illustrating). A nice rectangular box around
3 it. So, I'm going to mark this as "player."

4 If you start to look at the individual pieces,
5 it will start to look familiar. It looks like a
6 computer -- well, unfortunately our computers are no
7 longer here. But there is a keyboard. There is a
8 display. There's memory. Deep inside there is a chip
9 that does most of the work. This is the central
10 processing unit. It's the brains of the computer. And,
11 so, this is a computer that you may have at home.

12 I'll note that this computer has a modem.
13 This is the way the computer talks to the outside world.
14 So, today that might be a cable modem, something you pay
15 monthly to Time Warner or, you know, whoever your
16 provider is. In the old days -- well, actually they're
17 still around -- it could be a telephone modem, in other
18 words, basically your way of dialing in through the
19 telephone network to your Internet service provider.

20 Q. So, Dr. Wicker, when the player makes a request
21 and it goes -- it goes through the modem or it goes
22 through whatever the Internet -- that line that goes up
23 top, can you explain for the jury how it goes out and
24 goes back into the server -- or goes out to the server, I
25 should say?

1 A. Okay. So, from here your signals go out into the
2 outside world. And, again, it could be a cable modem,
3 could even be a satellite modem. I lived out in the
4 country for a while, and I had a satellite. It's the
5 only way I could connect to the outside world.

6 But however it is, you go through a connection
7 that's something called an "Internet service provider,"
8 an "ISP." This is Time Warner or HughesNet or whoever is
9 providing your connection to the Internet.

10 And from the Internet service provider we
11 actually get to the Internet. It looks so small here.
12 It's actually huge. It's worldwide. We'll put a box
13 around it so it's more substantial. But that's the
14 Internet. Okay? The whole world, Amazon, everybody
15 else.

16 Q. When you go out to make the request, when it gets
17 to the server, what happens when it gets to the server?

18 A. Okay. The Internet actually consists of a huge
19 number of servers. It's a lot of networks; and each
20 network has various servers on it, other people's
21 computers. This is just one server. And it looks big,
22 and it is pretty big (illustrating). But this is just
23 one piece of the Internet.

24 So, for example, if you were sitting at home
25 and you turned your computer on and you opened your

1 browser and you went to say *amazon.com*, you would type in
2 "*amazon.com*" or click on a link -- I actually have it on
3 a link because I buy a lot of books.

4 But anyway, you click on a link; and what
5 happens is a command goes through the Internet service
6 provider out over the Internet to a particular server.
7 It's got a certain address that your computer figures out
8 for you. And that server may have a lot of pieces to it.
9 We see a lot of pieces here. There's a lot of memory --
10 audio programs, advertising, text, announcements, all
11 kinds of stuff, Web pages. Okay? So, that's where the
12 Web page would make its way through -- actually it's like
13 this (indicating).

14 But basically this is all at the server site.

15 Q. Okay. Dr. Wicker, there are different types of
16 networks; is that right?

17 A. Excuse me. I forgot to write "server" up there.

18 Yeah. There are many different networks, lots
19 of network technologies.

20 Q. So, regarding the request that we're talking about
21 from the player to the server, does that work the same
22 essentially? We talked about the Internet; but even if
23 you're on some other type of network, it still has to go
24 from the player to the server?

25 A. Right. The basics are all still there. We have

1 something called a "client-server relationship" by which
2 when the client wants something, if you want the Amazon
3 Web page or the local news -- maybe you can read that on
4 the Web -- what will happen is you will click a link
5 using your mouse -- a mouse isn't shown. You may click
6 something on the keyboard. However you do it, though, a
7 request will go through your modem, through the Internet
8 service provider to the server. Whatever the technology
9 is, that's what's going to happen. The request will go
10 from the player through the Internet to the server and
11 then the server will respond, perhaps by sending you a
12 Web page, so that you can see what the news is or what's
13 available at this particular store or whatever it is.

14 Q. Okay.

15 MR. ELACQUA: Your Honor, can Dr. Wicker
16 re-take his seat?

17 THE COURT: Please.

18 THE WITNESS: Thank you.

19 BY MR. ELACQUA:

20 Q. Thank you, Dr. Wicker, for that explanation.

21 We're still on Figure 1. Let's move on to the
22 next slide, please. Explain for the jury -- just sort of
23 summarize what we were talking about.

24 A. Yes. This is a simple summary. On the right we
25 have a player computer. On the left we have a host

1 server. And I've repeated the court's claim
2 construction, the definition of "downloading" here. And
3 what we see is that the request -- we have "upon a
4 request by the player. Request means a communication to
5 initiate the transfer."

6 The player computer makes a request of the
7 host server.

8 Q. Now, we've been talking, I think, about the USB
9 and FireWire cables that come with iPods; is that right?

10 A. That's right.

11 Q. Okay. And what's your understanding as to whether
12 there's any dispute as to whether the iPods are USB
13 devices?

14 A. There is no dispute.

15 Q. Now, regarding USB, there is a specification for
16 USB. Explain sort of what the specification -- what is
17 that?

18 A. Okay. When you have a technology like USB or even
19 the technology we were talking about with regard to
20 talking to the Internet, standards are written. They're
21 basically big documents -- in fact, they're often several
22 times bigger than this notebook, sometimes shorter. But
23 basically these are documents so that everyone knows how
24 this particular technology works.

25 So, if I want to form a little company and be

1 able to connect through USB, I'll go get the USB standard
2 and I'll study it and I'll build according to what that
3 standard says and that way I'm guaranteed that my product
4 will work.

5 Standards basically allow lots of companies to
6 get involved with making products that can talk to each
7 other without fear of being incompatible.

8 Q. Okay. And this is the USB standard.

9 MR. ELACQUA: For the record, it's Defendant's
10 Exhibit 427 at page 46.

11 BY MR. ELACQUA:

12 Q. What's this -- it looks like one line of text.
13 What does this mean, Dr. Wicker?

14 A. Right. This is just one line from a rather long
15 document, from the USB standard that everyone builds to.
16 What it says is that. "The USB is a polled bus." It's
17 basically a fancy way of saying that you can't do
18 anything until the host controller asks you to. "The
19 Host Controller initiates all data transfers." So,
20 anytime data is going to be moved, it starts with the
21 host; and the host is what runs on the server as opposed
22 to the client.

23 Q. Now, we've heard a little bit of testimony about a
24 connect signal; is that right?

25 A. Yes.

1 Q. Explain for the jury -- if you could sort of
2 summarize what we've heard and whether you agree with
3 that or not.

4 A. Okay. Basically the connect signal is the way the
5 device tells the computer "I'm here." So, if I have my
6 laptop in front of me and I want to hook up a keyboard or
7 I want to hook up a mouse or I want to hook up my iPod,
8 basically what I'll do is I'll take a USB cable and plug
9 it into the iPod, for example, plug it into the computer;
10 and then there is a voltage change that tells the
11 computer something's there. That's the connect signal.
12 It basically says there's something that's been plugged
13 in.

14 Q. Now, is that a request to initiate a transfer of
15 data?

16 A. No. No. It's simply an indication that
17 something -- keyboard, mouse, iPod, whatever -- is there.

18 Q. Is it something equivalent to a request?

19 A. No. No. It's something -- the connect signal is
20 common to anything you plug into your computer, whether
21 it's a disk drive, a keyboard, a mouse. It simply says
22 "I'm here."

23 Q. Now, I see some of these USB devices you've just
24 mentioned. Do these all work the same?

25 A. Okay. There's a couple things here. On the left

1 you've got an iPod with a USB cable. But over here
2 (indicating) we have a mouse, for example. That looks
3 like a floppy drive, a hard drive, a keyboard. All of
4 these devices follow the USB standard. All of them when
5 you plug them in say "I'm here."

6 The "I'm here" signal, the connect signal,
7 can't mean initiate data transfer. It wouldn't make any
8 sense. For example, this floppy drive -- I think that's
9 a floppy drive -- plugging that in, why would it be
10 requesting a data transfer? Why would a keyboard or a
11 mouse be requesting a data transfer? It doesn't make
12 sense. It's simply saying "I'm here."

13 Q. How are these -- how is that different from a
14 request as far as the connect signal?

15 A. Well, it's passive. It's simply saying "I'm
16 here," and then it's up to the computer to decide what to
17 do with that mouse or keyboard.

18 If it's a mouse, for example, the computer
19 will interrogate it, find out what kind of mouse, find
20 out if there is any special software that has to be run
21 to make the mouse work. It's all up to the computer to
22 do the work.

23 Q. Is that a minor difference? A medium? Or is that
24 a large difference?

25 A. Well, I think it's about as large as a difference

1 can be because instead of going one way with a request,
2 you're going the other way. It's completely backwards.

3 Q. Now, do you have an opinion as to whether the
4 accused iPods actually either -- I believe we're only
5 talking about the doctrine of equivalents with regard to
6 this claim; is that right?

7 A. That's my understanding, yes.

8 MR. HOLDREITH: Objection to form. I believe
9 this is a structural equivalents.

10 MR. ELACQUA: I don't think so.

11 MR. HOLDREITH: Am I on the wrong claim
12 limitation?

13 MR. ELACQUA: Yes.

14 MR. HOLDREITH: I'm sorry. I withdraw the
15 objection.

16 MR. ELACQUA: Now you've got me confused.

17 MS. HOLDREITH: I apologize.

18 THE COURT: I thought I was following it.
19 Back up a step.

20 MR. ELACQUA: Certainly.

21 BY MR. ELACQUA:

22 Q. So, we're talking about the doctrine of
23 equivalents, right, Dr. Wicker?

24 A. That was my understanding, yes.

25 Q. Okay. And this is on claims 1 and 14 of the

1 '178 patent?

2 A. That's right.

3 Q. Okay. And do you have an opinion as to whether
4 these limitations under the doctrine of equivalents are
5 met?

6 A. Yes, I do.

7 Q. And what is that, Dr. Wicker?

8 A. I don't believe they are met at all. For example,
9 the way requests are done -- again, the claim language as
10 construed by the court, a request goes from the player
11 computer to the host server. The way it's done in the
12 accused products is it goes from a host computer running
13 *iTunes* to the iPod. That's exactly backwards. In my
14 mind, that's a substantial difference. I don't know how
15 it could be more substantial than to be completely
16 backwards.

17 Q. Thank you, Dr. Wicker. Now, based upon that, do
18 you have an opinion as to whether these claims are
19 infringed or not?

20 A. They are not infringed because any claim
21 limitation that calls for downloading -- for example, the
22 first limitation of claim 1, the second limitation of
23 claim 14. The court has said the request must go from
24 the player to the server. In the accused products they
25 do it exactly the other way around. Those limitations

1 are not met; so, those claims are not infringed.

2 Q. Now, is this opinion regarding the doctrine of
3 equivalents on '178 patent claims 1 and 14 -- is that
4 different than what we were talking about earlier with
5 regard to the software method?

6 A. The difference -- you mean with regard to what
7 kind of equivalents has been argued?

8 Q. Correct.

9 A. Okay. So, when you have a means-plus-function
10 claim, the equivalents were structural equivalents. It
11 was a question of whether the structure in the accused
12 device is equivalent to the structure the court requires
13 for the means-plus-function claim. So, that's structural
14 equivalents.

15 This isn't structural equivalents. This is
16 doctrine of equivalents, which is unfortunately the same
17 word. But in the doctrine of equivalents, we're asking a
18 different question, is what's in the accused product
19 substantially different from what that limitation calls
20 for. That's my understanding.

21 Q. Okay. Now, I think this takes care of the
22 '178 patent, claims 1 and 14. Let's move on to an
23 additional question we talked about yesterday. Explain
24 for the jury, please, what we're going to talk about in
25 the next section.

1 A. Okay. Well, this actually takes us back to
2 structural equivalents. There were several arguments
3 made that certain structures that were required by the
4 claim construction were somehow equivalent to what's
5 actually in the accused devices, and I'd like to talk
6 about four of those arguments because I don't think
7 they're right.

8 Q. Okay. Are these the four we're going to talk
9 about?

10 A. Yes. That's right.

11 Q. Okay. Let's talk about the first one if we could.
12 What's the first one, and what claims are we talking
13 about here?

14 A. Okay. This has to do with the means for
15 reproducing or means for translation. And one of the
16 structural requirements was for a sound card. And I
17 think that was discussed in some detail, what a sound
18 card is. But basically these -- sound cards are required
19 as structures to implement the means in the fourth
20 limitation of claim 1 -- and I'll again note the jury
21 notebook citations are on the right -- the fourth
22 limitation of claim 14, processing means for translating;
23 the fifth limitation of claim 1 of the '178 patent and
24 that's "a processor for continuously delivering."

25 So, again, claims 1 and 14 of the '076,

1 claim 1 of the '178 patent.

2 Q. Thank you, Dr. Wicker. What's that up on the
3 left-hand side of the screen?

4 A. That's a sound card. Now, a sound card --
5 actually all cards look something like this. They'll
6 have some sort of connectors on the outside. Here we
7 have some connectors for -- let's see. I can't see it
8 terribly well. But there will be connectors for
9 speakers, perhaps a connector for a microphone or a
10 headphone.

11 This (indicating) is a larger connector that
12 allows for an external audio connection of some kind.

13 This (indicating) is the internal connection.
14 This piece right along here (indicating) is the way the
15 sound card connects directly into the computer. I think
16 yesterday I talked a little bit about how in a computer
17 you've got an information highway. It's called a
18 "bus" -- at least I think I talked about that yesterday.
19 But, anyway, this is the way the sound card connects to
20 the information highway in the computer so that all of
21 these chips on the card can talk to the rest of the
22 computer.

23 Q. Now, roughly in size -- about what sort of size
24 are sound cards?

25 A. Well, they vary in size. This one looks like a

1 half size; so, we've got basically 3 inches this way
2 (indicating) and perhaps 3 or 4 inches going that way
3 (indicating).

4 In the old days we might have had cards that
5 were this big (indicating), you know. Those were
6 full-size cards. Now they keep getting smaller. But
7 that's a basic card right there.

8 Q. And the connectors you were talking about before,
9 those are the different colors up there?

10 A. This (indicating) is the connector right here.
11 This is what slides into a socket, a standardized socket,
12 by the way, that then allows this card to talk on the
13 information highway to the rest of the computer.

14 And I just want to point out while I'm here,
15 this (indicating) is a chip. Okay? Chips are soldered
16 onto cards, or sometimes they're put onto a socket so
17 they can be removed.

18 That's another chip.

19 And then we have discrete components. These
20 (indicating) happen to be capacitors.

21 And then there is what looks like some
22 switches of some kind. But basically there are lots of
23 parts. We have cards so that we can collect a bunch of
24 parts together and sell them separately so that we can
25 add functionality to our computers.

1 Q. Okay. And, Dr. Wicker, I think we talked a little
2 bit about the size of a sound card. I think you said
3 they're a few inches to sometimes larger. About how much
4 larger are we talking about?

5 A. Oh, they can be as much as -- going by memory now.
6 We don't see them this big quite as much anymore,
7 although some video cards are pretty big; so, they could
8 be as much as 10 inches long.

9 Q. Okay. Now, what is your understanding,
10 Dr. Wicker, as to whether the accused iPods actually have
11 a sound card?

12 A. They don't.

13 Q. And what's been accused to meet this limitation?
14 Do you know?

15 A. It's been suggested that the -- that there is a
16 chip -- a small converter chip, codec chip, excuse me --
17 codec -- there it is right there. "Codec" stands for
18 coder/decoder. Okay? So, that's an integrated circuit
19 that does the coding and decoding of the voice. It was
20 suggested that this little chip is structurally
21 equivalent to this entire card.

22 Q. And is it your opinion that it is?

23 A. No, it's not. For a number of reasons.

24 First off, I'll note that chips -- there is a
25 chip right there (indicating) that sits on the entire

1 card. The structure that's called for is not the chip.
2 It's the entire card. A chip cannot be equivalent to a
3 card. Chips sit on cards. They're not the same thing or
4 even equivalent.

5 Q. I think we talked a little bit about the first
6 bullet up there, the size.

7 Let's talk a little bit more about the second
8 bullet. Explain for the jury, please, what we're talking
9 about there.

10 A. Okay. So, this second bullet here, what I'm
11 talking about is the way these chips and boards connect
12 to the computer, the way they can do their processing.

13 Now, as I noted before, the sound card has
14 this connector right here (indicating). That's the way
15 it basically slides into a slot and can talk to the
16 computer. Chips don't have connectors like that. Chips
17 have little pins -- it's really hard to see. And those
18 pins allow the chip -- here (indicating) you can see it a
19 little better -- the chip to be mounted onto the card.
20 But chips and cards don't connect the same way. Cards
21 have standardized pins that go into sockets in the
22 computer. Chips have to be mounted on boards before they
23 can talk to the rest of the computer.

24 Q. Now, I see up here you have something that says
25 they're not interchangeable. What exactly does that

1 mean?

2 A. That means you can't just take a card out and
3 stick in a chip. It won't work. They do different
4 things. They connect in different ways. You can't swap
5 them out.

6 Q. Now, the last bullet, is that describing one of
7 the different things they do?

8 A. Yes. This has to do with the fact that sound
9 cards are typically sold in the mass market. In other
10 words, they do basic sound stuff, for example, sound for
11 video games, things like that. Sound cards don't play
12 proprietary audio formats. So, for example, advanced
13 audio coding, ACC, you won't find that -- or at least you
14 wouldn't find that on a sound card in 2000-2001.

15 Q. Okay. Now, a sound card is something more sort of
16 off-the-shelf; is that right?

17 A. Yes. That's what I meant by "mass consumer
18 produced." It's something you'd go to Best Buy or
19 Circuit City or something like that to purchase.

20 Q. Okay. Now let's move on to the next limitation,
21 which is the means for receiving. I think we've talked a
22 little bit about this throughout the last couple of days;
23 is that right?

24 A. That's right.

25 Q. Okay. Now, this relates to the '076 patent; is

1 that right?

2 A. That's correct.

3 Q. Okay. What limitation are we talking about here,
4 Dr. Wicker?

5 A. Okay. That's the second limitation of claim 1.
6 It's the means for receiving.

7 Q. And there is a long definition for this. Are all
8 of these numbers -- are we going to have to discuss all
9 of these, Dr. Wicker?

10 A. No. Just to quickly note, here we've got the
11 means for receiving. That's the claim language right
12 there. Means for -- as the court has construed them,
13 this is a means-plus-function limitation. So, we have a
14 function that's required; and then we have all of these
15 possible structures, 1 through 6. The only one of these
16 structures that's been discussed as being found in the
17 accused devices is 4, and even within 4 you've got two
18 choices. The focus has been on this infrared link.

19 So, a couple of days ago, there was discussion
20 of IrDA. IrDA is an infrared standard. That had to do
21 with the suggestion that the accused device's USB was
22 actually structurally equivalent to this infrared link
23 that's called for in the court's claim construction.

24 Q. Okay, Dr. Wicker. Now, I see the claim
25 construction. Is it just about infrared versus USB, or

1 is there a little bit more?

2 A. Well, it's not just infrared versus USB. It's a
3 question of tying back the structure to what's required;
4 namely, receiving and storing a file of data establishing
5 a sequence. And that connection is provided by the
6 patent itself, the written description of the patent.

7 Q. Okay. Now, you just mentioned the patent, I
8 think. Is there any discussion in the patent relating to
9 this infrared, or IrDA, connection we've been talking
10 about?

11 A. Yes. There's one place in the patent where
12 infrared's discussed. It's Plaintiff's Exhibit 1,
13 Column 7, 44 through 57. And so far I don't think this
14 context has been read. It might have been read once.

15 When the patent talks about infrared, it's
16 talking right here about (reading) facilitating the use
17 of the system in an automobile, a player computer may be
18 linked to the Internet via a local communications server
19 computer via a radio or infrared link when the car is
20 parked at the subscriber's home or office.

21 All right. So, to unpack all that stuff,
22 you're in your car. You've got your player. The player
23 connects to a local communications server in your garage;
24 and then that local communications server connects to the
25 Internet so you can download your programs, your audio

1 programs that are described in the patent.

2 Q. Dr. Wicker, regarding this claim construction and
3 the means for receiving, is the player going directly to
4 the Internet; or does it have to pass through something
5 else?

6 A. It has to pass through something else. Once
7 again, there is an infrared connection from the player in
8 the car to a server in the garage. And then the server
9 in the garage is what talks to the Internet, as described
10 here.

11 Q. Now, I think I have a slide up here that sort of
12 shows that. Dr. Wicker, what's your understanding as to
13 what's been accused of meeting this limitation?

14 A. What's been accused of meeting this limitation --
15 or at least being structurally equivalent -- is the USB
16 connection, the USB cable.

17 Q. Okay, doctor. And do you have an opinion as to
18 whether these two are equivalent?

19 A. They're not equivalent. In fact, I wish I had a
20 USB cable up here. But you can just imagine using a USB
21 cable in your car to connect to a server in your garage.
22 It would be a little cumbersome.

23 Q. And this, Dr. Wicker, is a USB cable right here
24 (indicating) that I'm holding up?

25 A. That's right.

1 Q. Okay. Now, let's talk about some of the
2 differences, if we can. What's the first difference that
3 we're talking about here, Dr. Wicker?

4 A. Okay. The first difference -- and I think this
5 has been discussed -- has to do with speed. How long
6 does it take you to download your data? Well, FireWire
7 even in 2000-2001 was quite fast, 400 megabits per
8 second. And, again, that's 400 million bits per second.

9 IrDA at the time was 4 megabits per second at
10 best, or 4 million. So, you can just go from 400 to 4.
11 It's a factor of a hundred, or two orders of magnitude.

12 Q. Is that difference a substantial difference,
13 Dr. Wicker?

14 A. Very substantial, because what it means is if
15 you're downloading a file of a given size through
16 FireWire, it's going to take one one-hundredth the time
17 it will take you to do it with IrDA. So, instead of ten
18 minutes, it will be a thousand minutes with IrDA. That's
19 a big difference.

20 Q. Now, would you -- as someone who is one of
21 ordinary skill in the art, would you be able to
22 substitute these two for one another?

23 A. No. No. There's far more than just the speed.
24 One is wired; the other is an actual optical beam that
25 has to be lined up. There are lots of issues that would

1 tell me that you can't just swap one for the other.

2 Q. Okay. Let's take a look at --

3 MR. ELACQUA: I think we've looked at this
4 exhibit already; but this is Defendant's Exhibit 42, for
5 the record, at page 10.

6 BY MR. ELACQUA:

7 Q. What is this, Dr. Wicker?

8 A. Okay. I think this came up during Mr. Fadell's --
9 Tony Fadell's presentation. This is a Dulcimer market
10 requirements document. So, here we see the Dulcimer.
11 That is the original code name for the iPod. And the
12 original iPod had 5 gigabytes of storage. That's
13 5 billion, with a "B," bytes. So, it's pretty large. It
14 was a hard disk, as we've talked about.

15 To fully load this thing up at 80 megabits per
16 second using FireWire takes 8 minutes. If you go slower,
17 as you can see with these other technologies, it's taking
18 longer, three hours, nine hours. If we used IrDA --
19 remember that factor of a hundred -- we'd be at 800
20 minutes.

21 Q. Okay. Now, I think you mentioned that -- started
22 to touch on this. Regarding IrDA and how IrDA works,
23 being a substitute or not, explain that to the jury,
24 please.

25 A. With regard to being a substitute, there is a

1 problem with optical systems, especially infrared
2 systems. Infrared systems -- you've used them. They're
3 your channel changer and your garage door opener.
4 Imagine you're trying to change the channel and someone
5 walks in front of you. You're blocked. It won't work.
6 You've got to get them out of the way or go around.
7 That's a problem with infrared systems. They're easily
8 interfered with.

9 There's also the problem of misalignment. If
10 you've got the TV in front of you and you're trying to
11 change the channel and you point the wrong way, it's not
12 going to work. Now, that problem gets worse with the
13 high-speed infrared. You've got to be really accurate
14 with the alignment for something called "direct beam
15 infrared" to have a good connection. You can't be off,
16 or it's not going to work.

17 Q. Okay. Now, what about another difference here?
18 What is this in relationship to, Dr. Wicker?

19 A. Okay. This is another big difference. Using USB
20 or FireWire, you can actually charge your device while
21 you're synchronizing it. So, when you plug one of these
22 things into USB or FireWire and hook it up to your
23 computer, not only are you synchronizing files, but
24 you're charging up the battery so you can use it for
25 another 11 or 12 hours or so. Infrared won't do that.

1 Infrared doesn't have the capability -- or at least at
2 these power levels -- doesn't have the capability to
3 charge the battery. You've got to have a cable to charge
4 the battery.

5 Q. These differences we've been talking about,
6 Dr. Wicker, are those minor differences?

7 A. They seem very substantial to me. Basically
8 you've got speed. You've got problems of alignment.
9 You've got the ability to charge versus not being able to
10 charge. Those are substantial differences.

11 Q. And what's this we're looking at? I think we saw
12 this before. Explain for the jury anything else you
13 considered in relationship to this limitation.

14 A. Okay. As Mr. Fadell testified, FireWire was the
15 initial choice for iPods; and FireWire was a new, novel
16 technology. In fact, Apple has 25 -- actually more than
17 25 patents on FireWire. So, in determining whether or
18 not FireWire was somehow equivalent to IrDA, I noticed
19 that FireWire was so novel and different that there were
20 all of these patents on it at the time. And, so, that
21 told me that was another area of difference with regard
22 to IrDA.

23 Q. Okay. Thank you, Dr. Wicker.

24 MR. ELACQUA: And for the record, that was
25 Defendant's Exhibit 176.

1 BY MR. ELACQUA:

2 Q. So, Dr. Wicker, I think we've already talked about
3 this; but if you could summarize, please, your opinion
4 with regard to this limitation and whether USB is the
5 same or equivalent to IrDA.

6 A. Well, this basically sums it up. IrDA is simply
7 not equivalent to FireWire or USB. There's just lots of
8 reasons why the two are substantially different.

9 Q. Let's move on, Dr. Wicker, if we can, to the next
10 limitation, the means for accepting. What limitations in
11 the patent are we talking about in the means for
12 accepting?

13 A. Okay. In the means for accepting, we're talking
14 about the third limitation of claim 1 of the '076, the
15 means for accepting, and the input means, which is the
16 second limitation of claim 14 of the '076.

17 Q. Okay. And I see on the left-hand side that's a
18 keyboard; is that right?

19 A. That's right.

20 Q. Okay. And is it your understanding as to -- that
21 is one of the structures that's been accused as being the
22 same or equivalent to the scroll wheel?

23 A. That's right.

24 Q. Okay. You've got a bunch of iPods in front of
25 you. Do those all have some type of scroll wheel?

1 A. Yes, they do.

2 Q. Okay. Now, are they all the same?

3 A. There are some differences, particularly with
4 regard to size.

5 Q. Okay. Now, with regard to some of -- the feel and
6 whether some are mechanical or touch or things like that,
7 are there any differences there?

8 A. The basic feel is the same for all of them, and
9 the ability to scroll by basically taking your thumb and
10 moving it around and such. So, they're basically -- they
11 have similarities, strong similarities.

12 Q. I see under the keyboard there you have some
13 letters. What does that mean, Dr. Wicker?

14 A. Okay. QWERTY -- those are the first six letters
15 on the upper left of the keyboard. That's how keyboards
16 are basically described.

17 A QWERTY keyboard is a standard keyboard that
18 you're used to typing on and doing your work on,
19 et cetera. It's what comes with most people's computers.

20 Q. So, Dr. Wicker, I see this is Dr. Almeroth's
21 opinion with regard to the keyboard. And what is your
22 understanding as to his opinion?

23 A. Well, he's saying that a scroll wheel, which you
24 see on the right, is structurally equivalent to the
25 keyboard on the left.

1 Q. And what is your opinion as to whether that is
2 true or not?

3 A. I don't agree with him. I think there are
4 substantial differences. I think the scroll wheel can do
5 far more than a standard QWERTY keyboard with regard to,
6 you know, moving or accelerating through a playlist,
7 while the QWERTY keyboard is capable of -- you know, you
8 can write an email. You can write a letter home. You
9 can do all kinds of stuff that you can't do with a scroll
10 wheel. They're just very different.

11 Q. Is there any other evidence you considered with
12 regard to the differences?

13 A. Okay. This patent is a patent for an accelerated
14 scrolling. It's a scroll wheel -- basically what -- this
15 is a bigger one. It's easier to see.

16 As you move your finger around
17 (demonstrating) -- and by the way, this particular one,
18 it actually moves; whereas, on some of the others, they
19 don't move. It actually senses that your finger is
20 moving across it. So, I think I'll use this one.

21 As I move faster, you could actually see it
22 accelerate. In other words, I'll actually move more
23 quickly through the playlist. So, if you've got a really
24 long playlist -- let's suppose for some reason you put
25 200 songs on it, or 300. That's a lot. But rather than

1 having to go absolutely through every single one, by
2 moving my finger more quickly it will actually
3 accelerate. It will go faster through that playlist so I
4 can find whatever I'm looking for much more quickly and
5 much more efficiently.

6 Q. Which iPod are you holding there? I think the
7 exhibit stickers are on the back.

8 A. This is Defendant's Exhibit 103.

9 Q. Okay. And the one before that you were talking
10 about, which exhibit number is that?

11 A. It is a much earlier iPod. It's Defendant's
12 Exhibit 97.

13 Q. Okay. Let's move on, if we can, to the next
14 limitation here, the means for storing. And this shows
15 up in what claim, Dr. Wicker?

16 A. Let's see. That shows up -- if we can go to the
17 next slide.

18 The '076 patent, claim 1. It's the very first
19 element, means for storing.

20 Q. Okay. And this is the definition again of the
21 means for storing?

22 A. That's right. Here we have the "means for"
23 language from the claim (indicating).

24 Here we have the judge's statement. It's a
25 means-plus-function limitation. In the court's claim

1 construction that was defined as a function and a
2 structure.

3 And in this case the structure that's required
4 is either (reading) a data storage system consisting of
5 both high-speed RAM and a persistent mass storage device
6 or a replaceable media, such as an optical disk
7 cartridge.

8 Q. And, Dr. Wicker -- now, some of the accused
9 products use only what's called "flash"; is that right?

10 A. That's right.

11 Q. Okay. And is it your opinion, Dr. Wicker, as to
12 whether flash is the same or equivalent to high-speed --
13 I'm sorry -- persistent mass storage?

14 A. First off --

15 Q. Let me start that question --

16 A. Okay.

17 THE COURT: Counsel, maybe this is a good time
18 to take a break.

19 Ladies and gentlemen, we're going to go ahead
20 and take a break. I'll ask you to be back at quarter of.

21 (The jury exits the courtroom, 9:31 a.m.)

22 THE COURT: We'll be in recess until quarter
23 of.

24 (Recess, 9:32 a.m. to 9:46 a.m.)

25 (Open court, all parties present, jury not

1 present.)

2 THE COURT: After this you have your damages
3 expert and whom?

4 MR. CORDELL: That will conclude our case,
5 your Honor.

6 THE COURT: Okay.

7 (The jury enters the courtroom, 9:47 a.m.)

8 THE COURT: Go ahead, counsel.

9 MR. ELACQUA: Thank you, your Honor.

10 BY MR. ELACQUA:

11 Q. Welcome back.

12 Dr. Wicker, when we left, we were talking
13 about the means for storing. And just so we're on the
14 same page here, this is only relating to the flash
15 products; is that right?

16 A. That's correct.

17 Q. Okay. Now, is there -- do the flash products
18 persistently store data?

19 A. Yes, they do.

20 Q. Now --

21 THE COURT: Just for record purposes, you
22 might want to state what flash products we're talking
23 about.

24 MR. ELACQUA: Thank you, your Honor. I
25 believe that's the iPod nanos.

1 THE COURT: Is that right, Dr. Wicker?

2 THE WITNESS: Yes, your Honor. That's
3 correct.

4 THE COURT: Okay.

5 BY MR. ELACQUA:

6 Q. Now, Dr. Wicker, in 2001 would someone consider a
7 flash to be a substitute for a hard drive?

8 A. No, they would not. The primary reason being that
9 the hard drives -- and, again, Mr. Fadell went into this
10 in some detail. The hard drives would store the same
11 amount, 5 gigabytes, but at a much, much lower price.

12 Had they chosen to use flash in the original
13 iPods, the devices would have cost more than \$2,000.

14 Q. Now, Dr. Wicker, we've just gone through about
15 four different structures in the '076 and '178 patents.
16 Just to summarize, Dr. Wicker, is it your opinion -- what
17 is your opinion as to whether these structures on the
18 right-hand side, the accused structures, are the same as
19 the structures on the left-hand side?

20 A. Okay. They are certainly not the same. The
21 identified structures in the accused devices are not
22 identical to what the court has required in its claim
23 construction.

24 Q. How about under the equivalents? And we're
25 talking about, again, the equivalent structure now.

1 A. For all the reasons I've discussed, I don't think
2 they're equivalent. I think they're substantially
3 different. In every case there were significant
4 differences that told me that they are not structurally
5 equivalent.

6 Q. Now, how about whether any of them would be a
7 substitute for one another?

8 A. They would not be substitutes for one another.

9 MR. ELACQUA: And for the record, we're
10 talking about DDX 463.

11 BY MR. ELACQUA:

12 Q. Now, Dr. Wicker, the last question -- I think that
13 answers the last question. Let's sort of summarize where
14 we've been now since yesterday and today regarding the
15 independent claims of the '076 patent and your reasons
16 that we talked about yesterday and today.

17 Regarding the independent claims, explain for
18 the jury how that affects the independent and then the
19 dependent claims.

20 A. Okay. Well, for all the reasons we've been
21 talking about for the last couple hours, there are a
22 number of limitations in the independent claims -- that's
23 claim 1 and claim 14 of the '076 patent -- a number of
24 limitations that simply aren't met. And even if just one
25 limitation is not met, the entire claim is not infringed.

1 So, that's why I've put a big "X" through claims 1 and
2 14. They are not infringed.

3 Q. Now, there are some additional claims that are
4 asserted that are not independent claims; is that right?

5 A. That's right.

6 Q. Okay. So, how does your opinions regarding the
7 independent claims have an influence on the dependent
8 claims?

9 A. Okay. All of those dependent claims start with a
10 line that says something like "a player as in claim 1" --
11 let's see. I'll need my glasses for that one.

12 "A player as set forth in claim 1." So, claim
13 2 requires everything that's in claim 1 plus some other
14 stuff. Well, if it requires everything that's in claim 1
15 and claim 1 is not infringed, then claim 2 is not
16 infringed.

17 Claim 3 requires everything in claim 2, which
18 requires everything in claim 1. If claim 1 is not
19 infringed, then claim 2 is not infringed and claim 3
20 cannot be infringed.

21 Q. And is that the same for claim 15 of the
22 '076 patent?

23 A. That's right. Claim 15 has this language here, "a
24 programmed digital computer for reproducing audio
25 programs as set forth in claim 14."

1 So, if 14 is not infringed, 15 requires it;
2 it's not infringed.

3 Q. Okay. Now, regarding the '178 patent, is that the
4 same type of analysis with independent and dependent
5 claims?

6 A. Yes, the exact same. There are a number of
7 limitations of claim 1 of the '178 patent that are not
8 met by the accused products. Claim 1 is not infringed.

9 The same for claim 14. There are a number of
10 limitations that aren't met by the accused products.
11 Claim 14 is not infringed -- of the '178 patent.

12 Q. Now, I see a graph of claims coming down here.
13 Are those all dependent claims?

14 A. There are a bunch of dependent claims. Claim 2
15 depends on claim 1. Claim 3 depends on claim 2. Claim 4
16 depends on claim 3. Claim 5 depends on claim 4. 6
17 depends on 5.

18 1 is not infringed, so 2 is not infringed, so
19 3 is not infringed, so 4 is not infringed, so 5 is not
20 infringed, so 6 is not infringed. It's sort of a
21 cascading effect.

22 Q. And 6 is the only independent -- dependent claim
23 that we're talking about in this graph, right? 2, 3, 4,
24 and 5 are not asserted; is that right?

25 A. That's right. But you sort of have to trace

1 through them to understand -- since 6 depends on 5,
2 you've got to look at 5; 5 depends on 4, et cetera. So,
3 to determine whether or not 6 is infringed, you've got to
4 trace back through to see what it depends on.

5 Q. Okay. And the same goes for claim 13; is that
6 right?

7 A. That's right. Claim 13 depends from claim 9. 9
8 is not infringed. 9 depends on --

9 Let me start that over again.

10 13 depends on 9. 9 depends on 1. Since 1 is
11 not infringed, 9 cannot be infringed, 13 cannot be
12 infringed.

13 Q. Okay. Dr. Wicker, I think this sort of concludes
14 kind of one section of the case. We're going to move
15 into another section if that's okay.

16 A. That's fine.

17 MR. ELACQUA: So, your Honor, I think I've
18 already passed out some additional notebooks.

19 THE COURT: All right.

20 MR. ELACQUA: Except for yourself.

21 THE COURT: Please.

22 MR. CORDELL: May I, your Honor?

23 THE COURT: Please.

24 MR. ELACQUA: Thank you, Mr. Corde11.

25 *

1 BY MR. ELACQUA:

2 Q. Dr. Wicker, this slide says "invalidity." And I
3 believe the next slide is one of the -- the second of the
4 primary questions we talked about yesterday. Explain for
5 the jury, please, sort of what we're going to talk about
6 now and maybe even how that relates to what we probably
7 first heard about in the Patent Office video.

8 A. That's right. There was -- the video talked about
9 someone's ability to say, "Not only do I not infringe
10 that patent, but that patent is invalid. Someone else
11 came up with these ideas before these folks went to the
12 Patent Office."

13 Q. Now, Dr. Wicker, explain here what we're going to
14 talk about as far as what's on the right-hand side. And
15 I think on the left is what we just finished talking
16 about.

17 A. Right. The left is all of that analysis we just
18 did that showed that these products don't infringe the
19 asserted claims, "these products" being all of the iPods
20 to my left.

21 The next thing that we're going to talk about
22 is whether or not Personal Audio's patents -- or at least
23 the asserted claims in this case of the '076 and
24 '178 patents -- whether they're valid.

25 Q. Okay. Now, the two things up there, what's on the

1 top?

2 A. Okay. The first thing that I put on this slide is
3 the DAD system, digital audio delivery. That's what was
4 demonstrated here in court yesterday by Mr. Novacek, Gene
5 Novacek.

6 Q. Okay. On the bottom, what's that a picture of?

7 A. That's something there has been a little
8 discussion of, something called the "Sound Blaster."
9 This is a computer program and a sound card that ran on
10 windows machines back in '95, that era.

11 Q. Okay. Now, Dr. Wicker, was any of this -- and
12 this is prior art; is that right?

13 A. That's correct.

14 Q. Was any of this considered by the Patent Office
15 before the claims in these two patents were issued?

16 A. No. And the reason I know that is that the
17 patents list everything that the examiner considered. If
18 you look at either one of the patents, there will be a
19 list of references. It's mostly patents, but sometimes
20 there are other articles and things like that. These two
21 things aren't on that list. The patent examiner didn't
22 have the opportunity to compare these systems to -- or
23 that manual on the left -- to the claims of the patent --

24 Q. Okay.

25 A. -- the asserted claims of the patent.

1 Q. Thank you, Dr. Wicker. Let's talk about what's on
2 the left-hand side. I think the jury has seen the
3 demonstration yesterday, but we haven't talked about the
4 manual. And this is the DAD system.

5 Now, Dr. Wicker, you were here yesterday for
6 Mr. Novacek's demonstration; is that right?

7 A. Yes, I was.

8 Q. And have you also reviewed the DAD manual in this
9 case?

10 A. Yes, I have.

11 Q. Okay. So, Dr. Wicker, as far as the timing here,
12 were these things before the patents-in-suit were filed?

13 A. Yes. This timeline, as you can see, runs from '93
14 to 2002. This is the filing date, October, '96, for the
15 '076 patent. The DAD system and the manual -- at least
16 the versions we're talking about -- are back here
17 (indicating), in August and September, '95. So, they are
18 at least a year before the filing date for the
19 application that turned into the '076 patent. And, of
20 course, they're well before the filing date -- March,
21 2001 -- of the '076 patent.

22 But I should note that for our purposes here,
23 this is the date (indicating) that I focused on, October,
24 '96.

25 THE COURT: Wait a minute.

1 MR. ELACQUA: Just for the record -- yeah, I
2 heard that, too, your Honor.

3 BY MR. ELACQUA:

4 Q. I think the issue date was March of 2001; is that
5 right?

6 A. That's correct -- I'm sorry.

7 Q. And the filing was October, '96.

8 A. I misspoke. What is shown here. This
9 (indicating) is the date.

10 Thank you, sir.

11 This (indicating) is the date the patent was
12 applied for. This (indicating) is the date that '076
13 actually issued.

14 Q. Okay. I think what we want to do here,
15 Dr. Wicker, explain for the jury sort of how we're going
16 to go through the DAD system and the DAD manual starting
17 with the first claim of the '178 patent.

18 A. Okay. So, what I have to do if this is indeed the
19 case that the DAD system anticipates, is I have to find
20 every single limitation, just like an infringement. I
21 have to find every single limitation in the DAD device to
22 show anticipation.

23 Q. Okay. Hold on one second. You just used the word
24 "anticipates." Explain for the jury, you know, what that
25 means.

1 A. "Anticipation" means that there is a device or a
2 system or a reference that was available before the issue
3 date -- excuse me -- before the application date of the
4 patent -- I keep getting those confused -- that has each
5 and every limitation of the claims.

6 Okay? So, to anticipate a claim, every single
7 element of that claim must be found in the prior art.

8 Q. Okay. Now let's start with the first one, the
9 '178 claim 1, the audio program player. I think there is
10 a definition for this; is that right?

11 A. That's correct.

12 Q. Okay. And I think we've looked at these
13 definitions a lot; but just for reference, what is the
14 audio program player definition regarding?

15 A. It's a device that "reproduces sound from digital
16 audio content."

17 Q. Now, Dr. Wicker, do you have an opinion as to
18 whether the DAD manual meets this limitation?

19 A. Okay. What I've shown here is page 16 of
20 Defendant's Exhibit 1, the DAD manual. And you can see
21 that there's discussion of "high quality (CD/DAT)" --
22 that's digital audio tape -- "stereo audio stored
23 digitally." There's record and playback capability,
24 high-quality random access audio, standard record and
25 playback functions.

1 So, clearly DAD is a device that reproduces
2 sound from digital audio.

3 Q. Okay. And these are from the DAD manual. How
4 about the DAD system?

5 A. Well, as we saw yesterday, it was sitting
6 here reproducing digital sound -- well, we didn't see.
7 We heard that it was reproducing digital sound.

8 Q. Okay. Now let's keep moving through the
9 '178 patent if we can. This is claim 1A of the
10 '178 patent, Plaintiff's Exhibit 2. The next few slides,
11 Dr. Wicker, are these some of the claim constructions?

12 A. Yes. This is the claim language or the
13 construction -- excuse me -- for a "communications port
14 for establishing a data communications link for
15 downloading."

16 Q. Okay. And the next claim construction is just the
17 downloading one that we've been talking about via
18 request?

19 A. That's correct.

20 Q. And the sequencing file limitation, this is also
21 found in the '178 patent in some of the other claims as
22 well?

23 A. Yes, that's correct.

24 Q. Now, explain for the jury, please, starting with
25 the communications port for downloading. Where in the

1 DAD manual are you looking here?

2 A. Okay. So, for the communications port, I've noted
3 pages 221 and 310 of the DAD manual.

4 First there is discussion of networked
5 workstations. Yesterday in court we saw how Mr. Novacek
6 actually networked his two DAD systems together. In
7 fact, he networked them and then un-networked them by
8 removing a cable. Well, that cable -- I think he held it
9 up. That cable is actually the cable that's discussed
10 here. It's an Ethernet cable with an RG-58 coax
11 connection. That's not a popular connection anymore; but
12 back in '94-'95, that would have been a typical Ethernet
13 connection for networking workstations.

14 Q. What's the next slide we're looking at here with
15 digital compressed audio program files? Where in the DAD
16 manual?

17 MR. ELACQUA: And that's again Defendant's
18 Exhibit 1 for the record.

19 A. Okay. This is page 50 where we have some
20 discussion of data compression. So, this is the claim
21 language, "digital compressed audio program files" and I
22 looked at page 50 and I see "data compression,"
23 "compression is applied to the digitized audio
24 information," "a number of compression formats are
25 available." So, it's telling me that DAD does indeed

1 include this claim limitation.

2 BY MR. ELACQUA:

3 Q. How about the sequencing file we've been talking
4 about?

5 A. Okay. The sequencing file would be the playlists
6 that Mr. Novacek downloaded and played and manipulated
7 here in court. Turning to the document which describes
8 the system, this is pages 69 and 330.

9 69 describes how there is a separate
10 sequencing file. We touch the "play" button on the
11 playback machine, and your playlist will begin playing.

12 On page 330 it shows that the playlists to
13 access their music and the audio cuts are stored in
14 different places. Now, this is a little cryptic, but
15 basically this is an address in the files system. What
16 it shows me is there is a separate place for playlists
17 among the files from the cuts which are files. So,
18 playlists and cuts are stored in two different places.

19 Q. Okay. Now, how about the downloading that we've
20 been talking about which comes via request from the
21 player? Is that met by the DAD manual?

22 A. Yes, it is.

23 Q. Okay. Now, can you explain for the jury some of
24 the citations in the DAD manual that you're talking
25 about?

1 A. Okay. These cites are from pages 283, 221, and
2 183.

3 The first is the playback_lookahead and that
4 was something that Mr. Novacek demonstrated yesterday.
5 Basically "this feature copies audio files from the
6 network to the local hard drive in the background."
7 Basically it looks ahead of what's playing and downloads
8 that music ahead of time so when it comes time to play
9 it, it will be there and available.

10 Q. Okay. Now, how about the next cite, in the middle
11 there? What is that talking about?

12 A. Okay. This says, "We recommend that a standby
13 playlist and related standby audio cuts be kept in the
14 local hard drives." So, it's basically saying we suggest
15 that once they're downloaded they be stored locally just
16 in case there is a network failure.

17 Q. Okay. And let's move on now to downloading the
18 sequencing file. Is it your opinion that this limitation
19 is met by the DAD manual, DAD system?

20 A. Yes. We saw the downloading of a sequencing file
21 yesterday. He downloaded a sequence file from -- let's
22 see, from your perspective, the computer on the right to
23 the computer on the left. The on-air computer downloaded
24 it from the server.

25 And, so, here in the manual we see a

1 description of the same things. There is an import -- an
2 "import" button is used to import playlists from the
3 server to the on-air machine.

4 Here is a command that says "download
5 playlist. Download playlist from remote system."
6 "Remote system" in this case would have been the server
7 on the right. So, you know, that was a relatively short
8 cable. The server from which he was downloading could
9 have been in another room, could have been in another
10 city.

11 Q. Okay.

12 A. It still would have worked.

13 Q. So, Dr. Wicker, is it your opinion that the
14 limitations -- what is your opinion with respect to the
15 limitations of the '178 patent claim 1 -- in the first
16 part, 1A, with regard to the DAD manual?

17 A. They're clearly present, both in the DAD manual
18 and in the DAD system.

19 Q. Okay. Now let's move on to 1B. 1B, Dr. Wicker,
20 is the digital memory unit limitation?

21 A. Yes.

22 Q. Okay. So, where in the DAD manual are we looking
23 for this limitation?

24 A. Okay. This is in page 83, and the persistent
25 storage is found in the DAD manual in the form of the

1 disk drives.

2 Here is a reference to a local drive. The
3 local drive is the disk drive that's on the on-air
4 computer. It's local in the sense that it's on the
5 computer that's in front of you. Okay? And, again,
6 that's a form -- the disk drive is a form of persistent
7 storage. It's a hard disk.

8 Q. Now, yesterday we saw the DAD system in court.
9 Was the hard drive in the DAD system in court?

10 A. Yes, it was.

11 Q. Okay. What's your opinion, Dr. Wicker, regarding
12 this limitation of the '178 patent, 1B?

13 A. It is present, both in the system and in the
14 manual.

15 Q. Now let's move on to 1C if we could, the audio
16 output unit. Where in the DAD manual are you looking for
17 this limitation?

18 A. This is page 314 of the DAD manual and it talks
19 about audio outputs and it references stereo headphones.
20 On the actual system you can use headphones, and we also
21 saw demonstrated yesterday the use of speakers so that we
22 could all hear what Mr. Novacek was playing.

23 Q. Okay. Just for the record, again, the DAD manual
24 you're referring to is Defendant's Exhibit 1?

25 A. Yes. I'm sorry about that.

1 Q. That's okay. I just wanted to make sure we're
2 clear.

3 Now, the manual controls of the DAD manual or
4 DAD system, are those present?

5 A. Yes. The fourth element of claim 1 requires one
6 or more manual controls. Apparently this is something
7 there is no dispute about. We saw lots of manual
8 controls in the form of keyboards. Mr. Novacek had a
9 keyboard in front of him, and he was typing away.

10 Q. Okay. Now, the next limitation -- this is one of
11 the software methods; is that right?

12 A. That's correct.

13 Q. Okay. Now, again for the jury, this is the larger
14 algorithm we've been talking about; is that right?

15 A. Yes. That's correct.

16 Q. Okay. Now, where in the DAD manual are you
17 looking to see whether this limitation is met? Let's
18 first talk about the function, which is the continuously
19 delivering function.

20 A. Okay. So, this is on pages 107 and 67 of
21 Defendant's Exhibit 1, the DAD manual.

22 And here it says, "Each cut will play in
23 succession" -- they'll play one after another -- "with no
24 further input." The machine will play through the last
25 cut and then rotate to the top of the playlist and begin

1 again.

2 So, what that tells me is there is a big loop.
3 It will continue to play music over and over again in the
4 playlist until you make it stop.

5 Here is another reference that talks about
6 "automatically play one cut after another."

7 Q. Now let's talk about the structure.

8 MR. HOLDREITH: Your Honor, I have an
9 objection -- I have no objection to showing these slides
10 but they keep getting popped up before the witness is
11 testifying and I think the slides are leading the
12 witness.

13 THE COURT: The questions might lead him. I'm
14 not sure that -- overruled. With an expert witness --
15 you might establish how these slides came into being.

16 MR. ELACQUA: Yes, your Honor. We can talk
17 about that again.

18 BY MR. ELACQUA:

19 Q. Dr. Wicker, as part of your presentation yesterday
20 and today, did you help prepare some demonstrative slides
21 to assist the jury?

22 A. Yes. I took cites from my expert report,
23 material --

24 THE COURT: No, wait. The question is: Did
25 you help prepare these slides?

1 THE WITNESS: Yes, your Honor.

2 THE COURT: Not just some slides.

3 MR. ELACQUA: Yes.

4 THE COURT: Okay. Overruled.

5 BY MR. ELACQUA:

6 Q. Dr. Wicker, what are we talking about on this
7 slide here?

8 A. Okay. So, up at the --

9 THE COURT: Hold up.

10 And, ladies and gentlemen, he's prepared the
11 slides. These are part of his opinion. They're not
12 evidence. They're not facts. It's part of his opinion.
13 He gets to explain to you, just like the other experts
14 have. Please keep in mind that just because an expert or
15 someone has prepared a slide -- you're going to evaluate
16 that based on the witness' testimony and your evaluation
17 of the witness' testimony just like you have with all of
18 the other experts. But you're allowed to view them
19 because it would be very hard to understand all of this
20 if someone just sat here and talked without any pictures.
21 That would be almost unworkable.

22 So, go ahead, counsel.

23 MR. ELACQUA: Thank you, your Honor.

24 BY MR. ELACQUA:

25 Q. Dr. Wicker, again, this is part of the structure.

1 Explain for the jury, please, what we're talking about in
2 the DAD manual.

3 A. Okay. So, this is part of the structure that
4 calls for a general purpose computer with a sound card.
5 We talked about sound cards a little while back -- and a
6 digital-to-audio converter.

7 So, when I look at page 310, for example, of
8 the DAD manual, I see lots of evidence that tells me
9 that, first off, it's a general purpose computer. Once
10 again, the writing is kind of small. What this says here
11 is "80486DX, 50 megahertz." That tells me we're dealing
12 with a basic desktop computer of about the 1994-'95 time
13 frame.

14 Now, the next thing I note is there's a lot of
15 analog and digital. That's telling me we're working with
16 sound, perhaps music, as it turns out. And specifically
17 there is a dynamic range of 92 DB. What that tells me is
18 there is a D-to-A converter and that D-to-A converter has
19 roughly 16 bits of resolution.

20 Q. Now, regarding a sound card, do you have an
21 opinion as to whether a sound card is present in the DAD
22 manual -- in the DAD system?

23 A. Yes. There's definitely a sound card present. If
24 you go to the --

25 Q. How do you know that?

1 A. Go to the next slide, please.

2 Now, this is a discussion of a particular
3 audio adapter. It's a particular sound card. There were
4 several versions. I just picked this one to show you.
5 This is page 315 of Defendant's Exhibit 1, the DAD
6 manual.

7 First off, I want to note -- you remember when
8 I showed you that picture of the sound card earlier? I
9 said there are lots of connectors. Well, if you'll look
10 here, there's lots of connectors. Here we have an analog
11 connector -- that's a 9-pin D connector.

12 A digital connector, an analog connector.
13 There are lots and lots of connectors.

14 But if we can actually go back to the other
15 again.

16 We also see that there are -- thank you -- a
17 number of processors. And in particular I want to note
18 this line that's not highlighted (indicating). It says
19 "Quantization: 16 bits." That's what I got from the
20 previous slide. It happens to be verified here. This is
21 telling me it's a card with lots of connectors that does
22 digital-to-analog conversion. It's a sound card.

23 Q. Now, Dr. Wicker, regarding the rest of the
24 structure, in particular some of the structure relating
25 to the Selection_Records and scanning, were those present

1 in the DAD manual, the DAD system?

2 A. Yes, they were.

3 If we can go to the next slide, please.

4 What this shows is the Selection_Record as
5 found in the DAD manual. This is page 330 of the DAD
6 manual; and it shows it's a data structure, like the
7 structure we had in the patent. It said a
8 Selection_Record has to have two things. Well, this
9 particular structure has lots of things; but it has the
10 two that are required by the court. We have a ProgramID;
11 a "cut" identifier; and we have a type, a LocType, that
12 tells me what kind of Selection_Record this is within the
13 playlist.

14 Q. Now, how about some of the other structures?
15 There was a structure, if I recall, called "CurrentPlay"?

16 A. Yes. That's right.

17 Again, if you'll go to the next slide, you'll
18 note that Mr. Novacek talked about this. This
19 (indicating) is the position variable. It's the number
20 that tells us what this particular next entry is, this
21 Selection_Record that's about to be played. So, it's the
22 "playlist position number of the cut currently displayed
23 in the highlight bar."

24 Q. Okay. Now, in regards to that CurrentPlay
25 variable, does that stay the same or does that change as

1 you go through a DAD playlist?

2 A. No. It increments as you go through the list.

3 Q. And where in the DAD manual here are you looking
4 for the record again, Defendant's Exhibit 1?

5 A. Okay. This is page 107. It says, "Each cut will
6 play in succession, with no further input. The machine
7 will play through the last cut, and then rotate to the
8 top of the playlist and begin again."

9 Q. Okay. Let's go back to the previous slide. How
10 would that work with regard to the position number in the
11 CurrentPlay variable?

12 A. Okay. So, as we finish a particular entry, this
13 number here (indicating) will increment.

14 Let's see. Is that a 2? It will go from 2 to
15 3 to 4 as it moves through this playlist (indicating).

16 Q. Now, with regard to the scanning in these
17 limitations, is that present in the DAD manual, DAD
18 system?

19 A. Yes, it is.

20 Q. Let's sort of move on to the second half of the
21 '178 patent claim 1, if we can. What are we looking at
22 here, Dr. Wicker?

23 A. Okay. This is the claim language associated with
24 "a processor for discontinuing the reproduction of the
25 currently playing audio program file." So, we're getting

1 into the part where you skip ahead or you skip back,
2 depending on which controls you actuate.

3 Q. Okay. Now, this is the "go" command that we've
4 been talking about throughout the last week or so?

5 A. That's correct.

6 Q. Okay.

7 A. It's "next" in the DAD system.

8 Q. And where in the DAD system are you looking for
9 this limitation?

10 A. Okay. This is the screen that we saw in
11 Mr. Novacek's system. This is actually from -- this is a
12 screenshot that's in Defendant's Exhibit 1. This
13 selection of text is from page 108.

14 It says, "Note that you can load any cut in
15 the playlist by placing it in the black highlight bar and
16 then touching the 'next' button."

17 Okay. That's the "next" button (indicating).
18 That's an "N." And, so, by moving through and selecting
19 a particular entry and hitting "N," you'll jump right to
20 it. So, that's a way of navigating through and quickly
21 jumping, whether forward or backward, to whatever song
22 you want to listen to.

23 Q. Now, when you select a song, does it actually go
24 and play it or does it do something else?

25 A. When you select the song, you then have to hit the

1 "N" and it will play it.

2 Q. Okay. I think this might conclude the '178 patent
3 claim 1, Dr. Wicker.

4 What is your opinion with respect to the
5 '178 patent claim 1 in regards to the DAD manual?

6 A. Okay. Well, I was able to find each and every
7 limitation of claim 1 in the DAD manual as well as the
8 DAD system. So, that told me that since the DAD system
9 and manual were older than the application date for
10 claim 1, that they anticipated claim 1.

11 Q. Okay. And, again, anticipated -- just to remind
12 the jury, what does that mean?

13 A. It means each and every element of the asserted
14 claim has been found in a single document or a single
15 device.

16 Q. Okay. Let's move to the next asserted claim.
17 What's the next asserted claim, Dr. Wicker?

18 A. That would be claim 6 --

19 Q. Okay.

20 A. -- of the '178 patent.

21 Q. And this is a dependent claim?

22 A. That's right.

23 Q. Okay. So, in order to find claim 6, would you
24 have to go through all of the other claims?

25 A. Yes, you would.

1 Q. Okay. Let's look at claim 2, if we can, first.

2 What are we looking at here, Dr. Wicker?

3 A. Okay. Claim 2 calls for "a display screen for
4 displaying a scrollable listing." And, of course, that's
5 exactly what we see right here (indicating). There is a
6 display screen with a scrollable listing. I'm pointing
7 to Defendant's Exhibit 1, page 16.

8 Q. And on the left-hand side there, is that the DAD
9 system?

10 A. Yes, it is. That's what we saw in court. I think
11 the black box was actually underneath, but that was the
12 system.

13 Q. Now, what about the next part of claim 2? This is
14 2B.

15 A. Okay. Claim 2 -- the second element of claim 2
16 calls for "said listener-selected audio program file is
17 chosen by said listener by employing one or more of said
18 manual controls."

19 Well, we certainly saw that happening. We saw
20 him -- Mr. Novacek scrolling through using his keyboard
21 and then selecting something to be played.

22 Q. Okay.

23 A. Or his mouse, as the case may be.

24 Q. Now, how about claim 3 of the '178 patent?

25 A. Claim 3 calls for (reading) a display screen

1 providing a visible indication of said currently playing
2 audio program file.

3 Well, that's what we see right here
4 (indicating). That is the indication of what's being
5 played right now, right in that portion of that screen.

6 Q. Now, in the DAD system we saw yesterday in the
7 demonstration, was that one of the -- was that the
8 playlist or was that some other screen?

9 A. It showed the playlist, and what was being played
10 was above the playlist.

11 Q. What's the next limitation that we have to talk
12 about, Dr. Wicker?

13 A. Okay. This is claim 3 -- I'm sorry. This is
14 claim 4 which depends from 3. The "processor responds to
15 a skip forward program selection command" and instead of
16 continuing" -- let me back up.

17 "Processor responds to a skip forward program
18 selection command accepted from said listener by
19 discontinuing the reproduction of said currently playing
20 audio program file" -- it stops what's playing now --
21 "and instead continuing the reproduction at the beginning
22 of that audio program file which follows" what's been
23 playing.

24 So, basically you stop what you're playing
25 now, go to the next song, and start there.

1 Q. Now, this is one of the limitations that has one
2 of the algorithms; is that right?

3 A. That's correct.

4 Q. Okay. And describe for the jury again some of the
5 elements of this claim construction.

6 A. Okay. So, we have a function that's been read
7 several times; and then there's an algorithm that has to
8 be performed. And the algorithm requires "scanning
9 forward in the sequencing file to locate the next
10 Selection_Record of the appropriate LocType."

11 Q. Now, I see there are some words highlighted up
12 there. Have we talked about any of those words in the
13 DAD manual already?

14 A. Yes, we have, some of them.

15 Q. For example, the Selection_Record structure, we
16 discussed that?

17 A. Yes. The Selection_Record is the entry in the
18 playlist.

19 Q. Now, how about the scanning forward for the
20 LocType? Have we talked about that?

21 A. A little bit, yes.

22 Q. Okay. If you could talk a little bit more about
23 how the DAD manual or DAD system describes that.

24 A. Okay. I think it's on the next slide.

25 Q. I think the next is skip to the beginning.

1 A. Oh, skip to the beginning. Okay.

2 So, what happens, the LocType -- the type is
3 within a file. As I showed before, there's actually
4 several entries for a given song or a given playlist
5 entry. But that included the ProgramID and the LocType.

6 So, what will happen is that as we scan
7 forward, if it's something playable, it will have a
8 particular LocType associated with it and it will play
9 that. But if it's a comment, for example -- we saw an
10 example where it's telling the operator to read something
11 or we've got a timed entry. These are different entries
12 into the playlist. Those are different LocTypes and will
13 not be played as we're scanning forward.

14 Q. Okay. Now, how about the next limitation,
15 claim 5? What is this limitation describing?

16 A. Okay. This is skipping backwards. So, we've
17 talked about skipping forwards. Here the processor
18 responds to a skip backward program selection and
19 basically stops what's playing now and goes back to that
20 file and plays it.

21 Q. And this has an additional claim construction
22 we've talked about?

23 A. Yes, it does.

24 Q. Okay. Now, there are some structures here. Are
25 any of these structures different than the structures

1 we've been talking about?

2 A. No.

3 Q. And how about claim 6 for the '178 patent? I
4 think this is the actual asserted claim; is that right?

5 A. That's right. And again it depends on 5 which
6 depends on 4, and it just goes back and back to claim 1.

7 Claim 6 says "The audio program player as set
8 forth in claim 5 wherein said processor responds to a
9 skip backward program selection command accepted from
10 said listener."

11 And, so, it's going to stop what's playing now
12 "and instead continuing the reproduction at the beginning
13 of a program segment which precedes" -- skip backwards --
14 "the currently playing program segment."

15 Q. Okay. And this has an additional claim
16 construction that we've talked about; is that right?

17 A. Yes, that's correct.

18 Q. And what does that claim construction involve?

19 A. It basically -- as we can see here, it's got the
20 function that we've read and then it's got a general
21 purpose computer running a specific algorithm, the
22 algorithm including "scanning backward in the sequencing
23 file to locate the previous Selection_Record of the
24 appropriate LocType."

25 Q. Now, the '178 patent, claims 4, 5, and 6, where do

1 you find support in the DAD manual for these skipping
2 claims?

3 A. Okay. That would be the portion I think that's on
4 the next slide which talks about the structure of the
5 files.

6 So, once again, this is 108, Defendant's
7 Exhibit 1. We have a cut identifier, and then down here
8 (indicating) we have the type which I have associated
9 with the LocType.

10 So, then when we read the text, it says, "Note
11 that you can load any cut in the playlist by placing it
12 in the back highlight bar and then touching the 'next'
13 button at the right-hand side of the playback slot. If a
14 cut is currently playing, the machine will segue to the
15 highlighted cut."

16 So, if you want to skip backwards, you'll go
17 higher in the playlist by toggling here (indicating) and
18 then highlight it, hit "next." You'll jump back. If
19 it's the appropriate LocType, it will be played.

20 If you want to skip forward, you go forward in
21 the playlist, highlight it, hit "next." If it's the
22 appropriate LocType, it will be played.

23 Q. Now, was that sort of functionality demonstrated
24 yesterday?

25 A. Yes, it was.

1 Q. Now, Dr. Wicker, what is your opinion with respect
2 to the asserted claim 6 of the '178 patent regarding the
3 DAD manual?

4 A. All of the limitations of claim 6 can be found in
5 the manual as well as in the system itself.

6 Q. Are there any other claims asserted in the
7 '178 patent that depend on claim 1, which we've already
8 talked about?

9 A. Let's see. I believe there were. Here we have
10 claim 9. Claim 9 of the '178 patent depends from
11 claim 1, "The audio program player as set forth in
12 claim 1." It's got an additional limitation, "program
13 selections accepted from said listener."

14 Claim 13 depends from claim 9. So, it goes
15 from 13 to 9 to 1. 13 requires everything in 9 as well
16 as "at least some of said separate digital compressed
17 audio program files downloaded from said server computer
18 are selected by said server computer based on data
19 describing the preferences of or past requests submitted
20 by said listener."

21 So, here (indicating) we have program
22 selections accepted from the listener, and here
23 (indicating) we have the use of preferences on the part
24 of the listener.

25 Q. Do you find any support in the manual for these

1 limitations?

2 A. Yes, I do.

3 Q. And where is that?

4 A. If we go to the next slide, this is pages 111 and
5 93 of Defendant's Exhibit 1.

6 111 says, "The left area displays the contents
7 of the library or of a group within the library from
8 which cuts may be selected for inclusion in the
9 playlist." So, this is where the user can go to the
10 library, look stuff up -- I think he was looking for love
11 songs yesterday. You can look up a particular category
12 and add that music to the playlist.

13 The search -- this is page 93 -- "displays a
14 popup enabling the operator to search the library list
15 area for cuts that contain a particular character
16 string." Such as the word "love." So, that was how he
17 found a variety of -- I think it was three songs that
18 came up that had the word "love" in the title.

19 Q. Dr. Wicker, do you have an opinion as to whether
20 the DAD manual meets the limitations of claims 9 and 13
21 of the '178 patent?

22 A. It does.

23 Q. And why is that?

24 A. It allows you to include the user's choice, and it
25 works on the user's preference.

1 Q. How about the DAD system that we saw yesterday?

2 A. The manual does describe the system, but we saw
3 the system demonstrated; so, we can answer that question,
4 either way, as yes.

5 Q. Okay. Now, the next claim that's asserted is the
6 '178 patent claim 14. I see you have a graph up here.
7 First explain for the jury sort of how you're going to
8 talk about the '178 claim 14.

9 A. Okay. Claim 14 has a lot of the same ideas that
10 are in earlier claims. So, rather than read it all to
11 you over again and show you the same proof over and over
12 again, what I did was I associated the various claim
13 elements with my earlier discussions.

14 So, for example, for the audio program player,
15 some 20, 30 minutes ago I discussed that very thing when
16 I talked about '178 patent claim 1. So, I'll just point
17 to the earlier argument if that's okay.

18 Q. Yes, it is. Thank you.

19 And if you could walk the jury through this
20 claim 14 then.

21 A. Okay. So, the memory unit for storing a plurality
22 of audio program files, claims 1A and 1B.

23 We'll skip that B for a second here
24 (indicating).

25 For the separately stored playback session

1 sequencing file and the communications port, we discussed
2 that under claim 1A of the '178.

3 For the selected by said listener from a
4 library of audio program files, we talked about that in
5 the context of claims 9 and 13 of the '178.

6 And then, finally, the one or more controls
7 for accepting input commands, that's actually not
8 contested; but I'll note that it is the mouse and the
9 keyboard.

10 Q. And is there some additional sections of the
11 '178 patent?

12 A. Yes. This is the part that I said I did not cover
13 earlier. It's the program description data including
14 displayable text. So, this is the program description
15 data (indicating). All kinds of information, according
16 to the field name regarding the cuts.

17 Q. I think we should continue, Dr. Wicker, on the
18 '178 patent. It's a long claim. But if you can walk the
19 jury through the rest of the '178 patent, please.

20 A. Okay. Once again I'll point to the earlier
21 arguments rather than take up the court's time.

22 A display screen, we talked about that with
23 regard to claim 2 of the '178 patent.

24 Audio playback unit, continuously reproducing,
25 in the ordered sequence, I talked about that with regard

1 to claim 1E of the '178 patent.

2 A processor for executing, 1E of the
3 '178 patent.

4 Selected audio program, discontinue the
5 reproduction of the currently playing audio program,
6 instead continuing at the beginning of said selected
7 audio program, we just talked about that a few minutes
8 ago, claims 1E and 2 of the '178 patent.

9 Q. Now, there are some remaining limitations of the
10 '178 patent?

11 A. There are. It's a long one.

12 So, this is the portion of claim 14 that deals
13 with discontinuing the reproduction of said currently
14 playing audio program file and instead continuing. '178
15 claim 4 is where we talked about that. That's skip
16 forward.

17 Here for element C, discontinuing the
18 reproduction and continuing at the beginning of the
19 currently playing audio program file, that's where we go
20 back to the beginning of what we're playing now. That's
21 skip back to beginning of current, claim 5 of the '178.

22 Q. And the last limitation of the '178 patent?

23 A. The last one has to do with skip to previous.
24 Discontinuing the reproduction of the currently playing
25 program file and continuing at the beginning of that

1 audio program file which precedes, skip to previous.

2 That was claim 6 of the '178.

3 Q. Now, have we missed any of the limitations in the
4 '178 patent?

5 A. I don't think so.

6 Q. Do you have an opinion, Dr. Wicker, on the
7 '178 patent and the asserted claims and particularly the
8 one we just went through, claim 14?

9 A. Well, as I've just shown, every single element of
10 all of the asserted claims for the '178 patent can be
11 found in the DAD system or the DAD manual.

12 Q. Now, I think that concludes the '178 patent. If
13 it's okay, we can talk about the '076 patent now.

14 A. That's fine.

15 Q. Okay. Now, I see something similar to what we
16 just talked about. Explain for the jury, please, how
17 we're going to talk about the '076 patent.

18 A. Well, I'm going to do it the same way as I dealt
19 with the last couple claims. Rather than, you know,
20 dragging you through the same material over and over
21 again, I'm simply going to point to the earlier
22 discussion so you'll see that I covered it without us
23 having to actually do it again.

24 Q. Let's start with the top of it, "A player for
25 reproducing selected audio program segments comprising,

1 in combination" -- the means limitations.

2 A. Okay. So, a player, that's the first thing we
3 talked about, '178 claim 1.

4 Means for storing, 178 claim B.

5 Means for receiving and storing, '178 1A.

6 The means for accepting control commands
7 uncontested, it's the mouse or keyboard.

8 Means for continuously reproducing, '178 1E.

9 Means for detecting a first command indicative
10 of a request to skip forward, that's uncontested; but we
11 have talked about it.

12 And then, finally, continuing reproduction at
13 the beginning of a program segment which follows said
14 currently playing program. That's skip to next, claim 4
15 of the '178.

16 Q. Now, Dr. Wicker, there is an additional limitation
17 here I think we've talked about before, the means for
18 receiving. Let's look at that construction if we can.
19 Remind the jury what the "means for receiving and
20 storing" construction relates to.

21 A. Okay. So, the "means for receiving and storing a
22 file of data establishing a sequence," this is a
23 means-plus-function element, claim element. The function
24 is "receiving and storing a file of data establishing a
25 sequence."

1 Now, this was the structure. There were a
2 number of different options that can be followed,
3 everything from a conventional high-speed data modem,
4 modem dialup software, et cetera, all of the way down to
5 a replaceable media such as an optical disk cartridge.
6 Lots of options.

7 Q. Okay. Now, do you have any additional opinions
8 with respect to this limitation in the '076 patent?

9 A. Yes. I think we'll see that there is identical
10 function and identical structure.

11 With regard to the structure, DAD included a
12 means to receive and store sequencing files. The floppy
13 diskette that we talked about, that is a means for
14 receiving and storing as structure was defined by the
15 court.

16 Here we have removable storage devices, such
17 as a magneto-optical or floppy disk. That's explicitly
18 what was described in the last of the structure options
19 in the court's claim construction.

20 Q. Okay. Dr. Wicker, with regard to '076 patent
21 claim 1, do you have an opinion with respect to the DAD
22 manual?

23 A. Yes. Every element of claim 1 can be found in the
24 DAD manual as well as in the system.

25 Q. Now, we've been talking a little bit, for the last

1 little while, about the DAD manual and DAD system.

2 You're viewing those separately; is that right?

3 A. That's right.

4 Q. So, explain that to the jury, if you would,
5 because you said the "DAD manual" and the "DAD system."

6 A. Okay. I was told there are different kinds of
7 prior art. You can have a book, a single reference; or
8 you can have an actual system.

9 Now, the DAD manual describes the DAD system;
10 but I treated them as two different things. If I had to
11 find a particular limitation, I'd look for it in the
12 manual. And if it was there, that job would be -- you
13 know, I'd have found it. But I then had to go to the
14 system and find it again. So, I had to find the claim
15 elements -- all of the claim elements in both
16 individually in order to say that they were
17 anticipated -- say that the claims were anticipated.

18 Q. Thank you, Dr. Wicker. Let's move on, if we can,
19 to a few additional claims in the '076 patent, if that's
20 okay.

21 A. Sure.

22 Q. And what's the next claim we're going to talk
23 about?

24 A. Okay. If we'll go to the next slide, please.

25 This is claims 2 and 3 of the '076.

1 Now, once again, they depend on claim 1.
2 Claim 3 depends on claim 2. So, we have to do them all.
3 Going back to the beginning, a player, well,
4 we already talked about that. '076 claim 1E. We talked
5 about claim 1, the entire thing.

6 "Means responsive to a single one of said
7 second commands," that's skip to beginning, claim 5 of
8 the '178.

9 Going to claim 3, now we're going to go to the
10 beginning of a program segment which precedes. That's
11 skip to previous. We talked about that with regard to
12 the '178 patent claim 6.

13 Q. Okay. Now, I notice there is some means for
14 detecting relating to the claim 6; is that right?

15 A. That's correct.

16 Q. Okay. Now, there is a specific construction for
17 that?

18 A. There is. Once again, "means for detecting a
19 second command indicative of a request to skip backward."
20 The court defined the function, "detecting a second
21 command"; and then there were structures. So, the
22 structure in this case is a general purpose computer
23 running an algorithm; and the algorithm performs these
24 two steps (indicating).

25 Q. And how in DAD does DAD detect whether something

1 is a command or not?

2 A. Basically it's a software routine running on the
3 computer that detects inputs from the keyboard.

4 And, so, here we have a discussion of that
5 exact process. "Primary control of a DAD workstation is
6 accomplished via the graphic user interface and an
7 associated touchscreen, mouse or other pointing device."
8 In addition, we've got the keyboard.

9 So, when we look to the structures that have
10 been defined, the keyboard is right there as well as the
11 other elements that we've talked about.

12 Q. Now, Dr. Wicker, let's move on, if we can --
13 actually, before that, I think that concludes claims 2
14 and 3 of the '076 patent; is that right?

15 A. That's correct.

16 Q. And do you have an opinion, Dr. Wicker, as to
17 whether those limitations are present in the DAD manual?

18 A. They are present in the DAD manual. All of them
19 are present in both the manual and in the system.

20 Q. And, Dr. Wicker, again, just for clarification, is
21 it the same -- are you combining those together, or are
22 they separate?

23 A. They're separate. Once again, when I'm talking
24 about these two things, I found everything, all of the
25 claim limitations, in the system and then I found all of

1 the limitations in the manual. I did not combine those
2 references.

3 Q. Okay. Thank you, Dr. Wicker.

4 Now let's talk about some additional claims of
5 the '076 patent if we can. What's the next claim we're
6 going to talk about?

7 A. If we can bring up the next slide, please.

8 This is claim 14. Claim 14 is independent.
9 "A programmed digital computer for reproducing audio
10 programs." Well, we've talked about that a lot. I've
11 showed the proof for this first piece of claim 14 of the
12 '076 when I talked about claim 1E of the '178.

13 The mass storage device, claim 1A of the '076.

14 These next three are uncontested. We've got
15 the input means for accepting control commands -- we
16 talked about those structures just a moment ago -- the
17 output means for producing audible sounds, and then
18 finally the processing means for translating.

19 Q. Okay. What about some remaining limitations in
20 the '076 claim 14?

21 A. Okay. If you'd go to the next slide.

22 We have "processing means responsive to a
23 first one of said control commands" and, let's see,
24 instead of continuing the translation at the beginning --
25 oh, excuse me -- "and instead continuing the translation

1 at the beginning of the next program segment." So,
2 that's skip forward, claim 4 of the '178.

3 This is skip to the beginning of the current,
4 go back to the beginning of said currently playing
5 program, '178 patent, claim 5.

6 Q. Okay. Dr. Wicker, regarding the DAD manual, do
7 you have an opinion with respect to the DAD manual and
8 claim 14 and 15 of the '076 patent?

9 A. Yes. Pointing to all of those previous arguments,
10 all of those limitations are present in the DAD manual.

11 Q. And regarding the DAD system -- do you have a
12 separate opinion with respect to the DAD system?

13 A. Yes. I was also able to find all of those
14 limitations in the DAD system.

15 Q. Okay. Thank you, Dr. Wicker.

16 Now, in conclusion with DAD, again, what is
17 your opinion with respect to the DAD manual and all of
18 the asserted claims of the '076 and '178 patents?

19 A. Okay. So, we just went through every single
20 limitation of all of the asserted claims; and I showed
21 that all of those limitations could be found in the DAD
22 manual.

23 Q. And how about the DAD system?

24 A. I had the same conclusion. I was able to find
25 every single limitation of all of those asserted claims

1 in the DAD system.

2 Q. And, Dr. Wicker, if all of the claims are present,
3 what does that mean as far as some of the terms in patent
4 law that we've talked about earlier?

5 A. Okay. So, anticipation is basically finding every
6 single element of a claim within a single reference or
7 system.

8 In this case I showed you that every single
9 element of the asserted claims were found in the DAD
10 manual. So, the DAD manual anticipates all of the
11 asserted claims of the '076 and '178 patents.

12 Q. Now, Dr. Wicker, what's this next section we're
13 going to get into? I think you've previewed this before,
14 Sound Blaster. What is Sound Blaster? And explain for
15 the jury how we're going to talk about Sound Blaster.

16 A. Okay. Sound Blaster is a little different. I
17 wasn't able to find every single limitation in Sound
18 Blaster. There were some limitations that weren't there.
19 So, I had to ask myself would a person of skill know how
20 to do that, would it have been obvious for them to add
21 that to Sound Blaster.

22 I also had to ask another question, was there
23 another reference that a user might have combined with
24 Sound Blaster in order to get all of the limitations.
25 So, it's not anticipation. I did not find anticipation

1 for this. What I did find was something called
2 "obviousness." I think a person of skill would have
3 taken Sound Blaster and known how to add whatever was
4 missing or to get something that was missing from another
5 reference.

6 Q. Okay. Now, just to clarify, Dr. Wicker, you said
7 a couple times "a person of skill." Is that sort of any
8 person, or is that some particular person for this case?

9 A. No. It's -- well, it's a particular group of
10 people who have a certain amount of education and a
11 certain amount of technical experience. It's basically
12 the audience for the patent. It's the people who would
13 have read the patent and understood it given their
14 education and their background.

15 Q. Okay. Now, do you qualify under the court's
16 definition as "a person of ordinary skill"?

17 A. Yes.

18 Q. Okay. Let's start with Sound Blaster.

19 MR. ELACQUA: Just real quick, if I could have
20 Defendant's Exhibit 9, please -- I'm sorry. It's not
21 Exhibit 9. It's Defendant's Exhibit 3, Mr. Barnes.
22 Thank you.

23 BY MR. ELACQUA:

24 Q. What are we looking at here?

25 A. This is the user guide for Sound Blaster. Sound

1 Blaster is both software and a sound card. It's actually
2 a sound card of the kind we've talked about, and this is
3 a piece of prior art. This existed before -- well before
4 the patents in this case were applied for.

5 Q. What's that up on the top?

6 MR. ELACQUA: Mr. Barnes, if you could
7 highlight the top section, "user's guide."

8 BY MR. ELACQUA:

9 Q. What is that describing the user's guide for?

10 A. Okay. That tells us that this user's guide is
11 intended for the use of Sound Blaster with a PC that's
12 running *Windows 95*. And as you might imagine, this is
13 the 1995 time period. It is an older version of *Windows*.

14 MR. ELACQUA: Mr. Barnes, could you please go
15 to page 3, if you could?

16 BY MR. ELACQUA:

17 Q. And on the bottom left-hand side there where it
18 says the "copyright," what does that tell you,
19 Dr. Wicker?

20 A. Okay. Right here this tells me that this was a
21 document that was copyrighted in 1995. So, it's a
22 document that was produced in the 1995 time period.

23 Q. And how about just below that?

24 MR. ELACQUA: Scroll down, Mr. Barnes, please.

25 *

1 BY MR. ELACQUA:

2 Q. In the version here -- what version of this manual
3 are we looking at?

4 A. It's the first full version, 1.0; and it was
5 published in September, 1995.

6 Q. Okay. Thank you, Dr. Wicker.

7 MR. ELACQUA: Mr. Barnes, could we go back to
8 the slides, please?

9 BY MR. ELACQUA:

10 Q. And was Sound Blaster, Dr. Wicker, considered by
11 the Patent Office in regards to the two patents we've
12 been talking about, the '076 and the '178 patent?

13 A. No, it was not.

14 Q. Okay. And, so, I think we just looked at some of
15 the dates; but was Sound Blaster -- was the manual before
16 or after the filing date of the patents-in-suit?

17 A. It was before.

18 Q. Okay. Now, I think we're going to do something
19 similar to what we did before -- is that right -- with
20 regard to the claims and the claim limitations?

21 A. That's right. Although, the next thing I have in
22 my slides was just a demonstration that September, '95,
23 for Sound Blaster is more than a year before October,
24 '96, when the '076 was applied for.

25 Q. Okay. And what are we going to do next in regards

1 to the limitations we've been talking about with DAD?
2 Are we going to do something similar with Sound Blaster?
3 A. Yes. So, what I'll do is I'll go through all
4 those limitations again and I'll show you which ones are
5 in Sound Blaster and I'll tell you which ones aren't.

6 Q. Okay. Now, in applying your opinions to Sound
7 Blaster, are you using the same constructions we talked
8 about with DAD and we've been hearing throughout the
9 case, the ones in the juror notebooks?

10 A. Yes. Whether you're doing infringement or
11 invalidity, you've got to treat the claims the same way.
12 So, you use the court's claim construction exactly the
13 same way whether you're applying it to these devices or
14 to DAD or to Sound Blaster.

15 Q. Okay. Now let's talk about the first limitation
16 of claim 1 of the '178 patent again. Remind the jury
17 what we're talking about here and how we're going to walk
18 through Sound Blaster.

19 A. Okay. So, we've got to go through each and every
20 claim, each and every element; and I'll show you what
21 I've found in Sound Blaster.

22 THE COURT: Okay. Counsel, we're going to
23 take a break.

24 Ladies and gentlemen, I'll ask you to be back
25 at 11:00.

1 (The jury exits the courtroom, 10:46 a.m.)

2 THE COURT: What are the -- you've probably
3 provided this list before, but what are the references
4 that you're intending to bring along with Sound Blaster
5 to make it obvious?

6 MR. ELACQUA: The primary reference, your
7 Honor, is a *Windows 95* resource kit. That was the
8 exhibit, I believe, that --

9 THE COURT: Okay. All right. Very good.
10 We'll be in recess until 11:00.

11 (Recess, 10:47 a.m. to 11:00 a.m.)

12 (Open court, all parties present, jury
13 present.)

14 THE COURT: Please continue, Mr. Elacqua.

15 MR. ELACQUA: Thank you, your Honor.

16 Welcome back.

17 BY MR. ELACQUA:

18 Q. Dr. Wicker, when we left off, we were talking
19 about Sound Blaster; is that right?

20 A. That's correct.

21 Q. Okay. If you could, explain to the jury what
22 we're going to talk about next with reference to the
23 '178 patent.

24 A. Okay. Once again we're going to go through the
25 claims one limitation at a time, and I'll tell you what I

1 was able to find in Sound Blaster and what I wasn't able
2 to find.

3 Q. Okay. And how about claim 1 in the first
4 limitation of the Sound Blaster?

5 A. Okay. Claim 1 starts with "an audio program
6 player comprising."

7 If we could go to the next slide, please.

8 What we see here is that Sound Blaster is
9 clearly a device that reproduces sound. Here we have a
10 description. This is Defendant's Exhibit 3 through 9 and
11 looking at -- this is Figure 1.5 -- 1-5. And then I've
12 got segments from 25 and page 5.

13 So, here we have the statement, "Your Sound
14 Blaster 16 audio card" -- so, that tells us right there
15 that Sound Blaster is a sound card. What it does is it
16 "delivers the next wave of sound to your PC...including
17 the highest CD-quality digital audio."

18 So, Sound Blaster is a system -- a device that
19 reproduces sound from digital audio.

20 Q. And how about claim 1A of the '178 patent?

21 A. This is claim 1A. It calls for the communications
22 port that we've talked about many times.

23 Q. And do you find any support in Sound Blaster for
24 this limitation?

25 A. Yes.

1 Q. And where do you find that, Dr. Wicker?

2 A. If you could go to the next slide.

3 What we see here -- actually this is digital
4 compressed audio; so, I'll just go ahead and explain it.

5 The computers on which Sound Blaster runs are
6 standard PCs running *Windows 95*. These PCs have ports.
7 They have communication ports that are built in, RS-232
8 ports, specifically.

9 Q. And how about the sequencing file limitation,
10 Dr. Wicker?

11 A. Okay. The sequencing file takes the form, as you
12 see here, of a playlist. So, here we have a playlist
13 that's been formed with Sound Blaster. This is
14 Figure 1-14 of Exhibit 3.

15 Q. Now, you said -- are there playlists within Sound
16 Blaster, the Sound Blaster program?

17 A. Yes, there are.

18 Q. Now, the Sound Blaster, you said, is running on a
19 computer, the Sound Blaster manual here. Some of these
20 limitations require some downloading and things like
21 that; is that right?

22 A. That's correct.

23 Q. Now, does Sound Blaster -- the Sound Blaster
24 manual we're talking about, Defendant's Exhibit 3 --
25 disclose those things or not?

1 A. The Sound Blaster manual itself does not talk
2 about downloading.

3 Q. Okay. So, because the Sound Blaster manual
4 doesn't talk about downloading, what does that mean to
5 you?

6 A. Okay. What that means is Sound Blaster by itself
7 does not meet those limitations that call for
8 downloading. It's not there.

9 Q. So, in response to that, are you looking somewhere
10 else for those limitations?

11 A. Yes. The first thing that I asked myself was
12 given that it's not there, would a person of skill have
13 looked somewhere else in the normal scope of his or her
14 work to find -- to add downloading to Sound Blaster. And
15 the answer to that was yes, and I believe it's on the
16 next slide.

17 Here what we're talking about is an additional
18 reference. Now, Sound Blaster runs on a *Windows 95*
19 machine. We highlighted that part earlier. If you want
20 to know about *Windows 95*, you can go to a nice large book
21 called the "Windows Resource Kit." It's a very large
22 book, and it tells you about all the stuff that's
23 available in *Windows*.

24 So, if we look in this resource kit, we find
25 that there are means for downloading files. In fact,

1 it's the exact same way files are downloaded in the
2 patents-in-suit, FTP, the file transfer protocol.

3 So, here it says (reading) using FTP to browse
4 and download files. It talks about downloading from an
5 FTP site.

6 Q. Now, Dr. Wicker, just describe for the jury
7 exactly how you would use FTP.

8 A. Okay. FTP is an old protocol that was developed
9 for the Internet. It's called the "file transfer
10 protocol" because that's literally what it does. You
11 would get on a terminal or a computer, and you would go
12 through the Internet to access a server. File transfer
13 protocol would be the way you would grab a file off that
14 server and pull it back to you on your own machine. It's
15 a way of downloading. You make a request to the server
16 and then pull a file off that server. And the file could
17 be music. It could be an image. It could be all kinds
18 of things.

19 Q. Now, I notice you put these two references
20 together. Why would you put these two references
21 together?

22 A. Well, this is something that a person of skill
23 would have known to do. They would have been motivated
24 to do this. Once again, I'll point out that Sound
25 Blaster ran on *Windows 95*. So, if a person of skill was

1 looking to add to Sound Blaster, he or she would have
2 automatically looked to the Windows Resource Kit to see
3 what *Windows 95* could do.

4 Q. Now, using FTP for the downloading, is that via a
5 request?

6 A. Yes. The file transfer protocol starts at the
7 terminal, or the player, and reaches out and makes a
8 request of a server. You literally type in "FTP" and a
9 file name. I want this file, and the server gets it to
10 you.

11 Q. So, with regard to this limitation of the
12 '178 patent, Dr. Wicker, do you have an opinion as to
13 whether 1A is disclosed by Sound Blaster combined with
14 the Windows Resource Kit?

15 A. Yes. When you combine the two, then the
16 limitation is there. Okay? That's how it comes in
17 through obviousness as opposed to anticipation.

18 Q. Okay. And, again, just explain for the jury what
19 we're talking about when you say "obviousness as opposed
20 to anticipation."

21 A. Okay. There are two different kinds of
22 invalidity. If we found everything in the asserted
23 claims -- or in one of the asserted claims in Sound
24 Blaster alone, then that would be anticipation. But as I
25 told you, it's not all there. I did not find it all.

1 Obviousness is, okay, if there is something
2 missing, would a person of skill know how to do that,
3 would they be motivated to do that; or is there a
4 reference that an -- an additional reference that
5 provides it, can I combine two references that will give
6 me that missing element.

7 Q. And is it your opinion that you can combine these
8 two references, Sound Blaster and Windows Resource Kit?

9 A. Yes. I think a person of skill would have been
10 motivated to go to the Windows Resource Kit because that
11 tells them how *Windows* works, and that's -- Sound Blaster
12 was written for *Windows*.

13 Q. Okay. Now, what's the next limitation of the
14 '178 patent we're going to discuss?

15 A. Okay. If we can go to the next slide, please.
16 This is the second limitation, "a digital memory unit
17 coupled to said communications port for persistently
18 storing." So, this is the persistent storage limitation.

19 Q. And is this limitation found in Sound Blaster?

20 A. Yes, it is. Sound Blaster is using the hard drive
21 of the computer to store music and to store playlists.

22 Here we have a playlist that's shown, and the
23 individual files are also stored persistently on the hard
24 disk of the computer on which Sound Blaster is running.

25 Q. And what's the citation in the Sound Blaster

1 manual, for the record?

2 A. Okay. That figure is Figure 1-14 of Exhibit 3.

3 Q. Okay. And I believe that's at page 15, for the
4 record.

5 A. Page 15, yes.

6 Q. And what's the next limitation of Sound Blaster
7 here?

8 A. Okay. If we could go to the next slide, it's the
9 third element of claim 1, "an audio output unit including
10 at least one speaker or headset for reproducing said
11 audio program files." It's the speaker or headset
12 limitation. It's how you can actually hear the music
13 that's being reproduced.

14 Q. Okay. Did you find this limitation in Sound
15 Blaster?

16 A. Yes. If you'll go to the next slide.

17 There's discussion of delivering the next wave
18 of sound to your PC, adjusting the volume. Clearly the
19 music is being reproduced through headphones or
20 earphones. This is page 5 and 16 of Defendant's
21 Exhibit 3.

22 Q. And what's the next limitation we're going to talk
23 about?

24 A. Okay. Next slide, please.

25 This is the fourth limitation, "one or more

1 manual controls for accepting commands." Okay. The
2 manual controls would be the mouse that's controlling the
3 pointing and/or the keyboard with the computer running
4 Sound Blaster.

5 Q. Okay. How about the next limitation? I believe
6 this limitation is one that there is no dispute about; is
7 that right?

8 A. That's right. Personal Audio said that the Sound
9 Blaster includes manual controls.

10 Q. And this is the algorithm we've talked about?

11 A. Yes.

12 Q. And what's the first part of the algorithm, the
13 continuously delivering?

14 A. Okay. "A processor for continuously delivering a
15 succession of said audio program files."

16 It's basically playing files in succession
17 from a playlist.

18 Q. Now --

19 A. I should say --

20 Q. -- did you find support in Sound Blaster for this?

21 A. Yes, I did.

22 Q. And where is that?

23 A. If we could go to the next slide, please. This is
24 from page 10. It's a remote mode selector. It repeats
25 the current playing track or the whole playlist. So, we

1 get continuous play by repeating the entire playlist over
2 and over again through this repeat mode selector.

3 Q. Now, what about the general purpose computer sound
4 card -- I believe Sound Blaster has a sound card; is that
5 right?

6 A. Yes, that's correct.

7 Q. Explain for the jury, please, where you find
8 support for these limitations.

9 A. Okay. So, the general purpose computer lies in
10 the fact that the Sound Blaster card is literally put
11 into a PC that's running *Windows 95*. So, the general
12 purpose computer is the PC, or at least the -- well, it
13 is the PC.

14 Q. Now, this limitation requires some algorithm
15 structures; is that right?

16 A. That's correct.

17 Q. And does Sound Blaster have all of those
18 structures or not?

19 A. It has most of them. We do have a ProgramID, for
20 example.

21 Q. Now, I noticed -- let me stop you for a second,
22 doctor. I noticed you don't have anything up here about
23 a LocType.

24 A. That's correct.

25 Q. Dr. Wicker, is it your opinion that Sound Blaster

1 has or does not have this LocType?

2 A. It does not have a LocType. It's not there.

3 Q. And because it's not there, how does that affect
4 your opinion with regard to Sound Blaster?

5 A. Well, as with the accused products, if there is no
6 LocType, there are a number of claims -- well, all of the
7 asserted claims cannot be infringed or anticipated in
8 this case. So, there are a number of claim elements that
9 simply can't be met without that LocType.

10 Q. But in regard to Sound Blaster, do you have an
11 opinion as to whether Sound Blaster through some other
12 means would disclose this limitation?

13 A. Well, we've heard testimony in this case that the
14 accused products somehow meet those limitations that call
15 for the LocType even though it's not there. Basically by
16 playing one thing after another, it's been said that, you
17 know, there is a -- they're all the same LocType.
18 There's no need for the LocType.

19 Q. Let me stop you for a second. Is that the
20 algorithm relating to the software method of scanning
21 through the Selection_Records and incrementing the
22 CurrentPlay variable and things like that?

23 A. Exactly.

24 Q. So, with regard to Sound Blaster, Dr. Wicker,
25 what's your opinion with respect to those parts of the

1 software method and whether Sound Blaster through some
2 other means discloses those?

3 A. Okay. So, if one follows the argument that the
4 accused devices do this, then Sound Blaster does that
5 because Sound Blaster plays its playlist exactly like the
6 accused products do.

7 Q. And what about the CurrentPlay which we just
8 talked about, whether the CurrentPlay was in Sound
9 Blaster or not?

10 A. Okay. So, the CurrentPlay is not there. There is
11 a position indication, but I wasn't able to connect that
12 to the requirements of the claim limitations. But I
13 would note that we do "save settings on exit." There
14 were preferences including "play on start" or stop
15 playing on exit -- "stop playback on exit," which lets a
16 user continue to play the last file in the playlist when
17 returning to Sound Blaster. So, it's clear that Sound
18 Blaster does retain an idea of where we are in the
19 playlist. So, there is an indication of a CurrentPlay
20 variable of some kind.

21 Q. Now, I noticed you have here -- it says
22 "CurrentPlay variable was Obvious." What does that mean?
23 There's not another reference we're talking about here
24 like the Windows Resource Kit?

25 A. That's right. One way that one can find something

1 obvious is to use what a person of skill in the art would
2 have known. This is a person who's got a certain amount
3 of education and a certain amount of experience in
4 industry. That person would have known just from their
5 tool kit, just from what they know in their head from
6 their experience, that given what we see here, the
7 incorporation of a CurrentPlay variable would be an
8 obvious thing to do.

9 Q. Okay. Now, is that with regard to the whole
10 overall software method we've been talking about with
11 respect to the skipping claims that skip to a selected
12 song or previous or back or forward?

13 A. Yes. Exactly.

14 Q. Now, within Sound Blaster does Sound Blaster
15 actually -- would Sound Blaster play the audio?

16 A. Yes. Sound Blaster does play the audio.

17 Q. Okay. I think we might have already -- you might
18 have already touched on this slide, but again just remind
19 the jury of what we're talking about here.

20 A. Okay. So, what we see here is the playlist screen
21 that Sound Blaster provides. We have a playlist. It's
22 got three songs here (indicating), and it's going to play
23 them one after another.

24 Now, if we want to, we can move to different
25 songs and start them accordingly. We can move forward or

1 move backwards.

2 Q. Okay. Now, with respect to the last part of the
3 limitation of Sound Blaster, what's the last part of the
4 limitation?

5 A. Okay. The last part is the "skip to selected"
6 part. Actually I just mentioned that. "Discontinuing
7 the reproduction of the currently playing audio program
8 file and instead continuing the reproduction at the
9 beginning of a listener-selected one." So, it's
10 basically "skip to selected." You pick one, and you
11 start the play there.

12 Q. So, this also includes that algorithm method we've
13 been talking about; is that right?

14 A. That's exactly right.

15 Q. And does your opinion differ in any way with
16 respect to that method and obviousness?

17 A. No, it does not.

18 Q. Okay. Now, I think that concludes '178 claim 1.
19 What was your opinion, Dr. Wicker, in regards to Sound
20 Blaster and the Windows Resource Kit and the knowledge of
21 one of ordinary skill in the art?

22 A. Okay. Again, Sound Blaster by itself didn't
23 disclose all of the elements of claim 1; but when I took
24 into account what a person of skill would know and in
25 particular that a person of skill would have gone to the

1 *Windows* resource guide, that told me that with that
2 combination, claim 1 was obvious.

3 Q. Now let's move on to the next claim that's
4 asserted. Is that claim 6?

5 A. Yes, it is.

6 Q. Okay. And again this depends on a bunch of
7 claims; is that right?

8 A. Yeah. 6 is the one that depends on 5 which
9 depends on 4, all the way back to 1.

10 Q. Okay. So, where are we going to start? After
11 claim 1, we're going to go to claim 2?

12 A. That's right. That's the natural way to do it.

13 Q. And please describe for the jury where in Sound
14 Blaster you find support for this limitation.

15 A. Okay. This is the Sound Blaster manual,
16 Defendant's Exhibit 3, at page 15.

17 Over here (indicating) -- and the reason I'm
18 pointing to this is that claim 2 calls for everything in
19 claim 1 -- we've talked about that -- and "a display
20 screen for displaying a scrollable listing."

21 Well, that's what we're seeing right there
22 (indicating). It's a little small, but that's our
23 scrollable listing of a short playlist.

24 Q. Now, display screens and scrollable listings, is
25 that something that was known around the time of the

1 filing of the patents-in-suit?

2 A. Yes, definitely.

3 Q. How about claim 3?

4 A. Okay. Claim 3, which again depends from claim 2,
5 has a display screen that provides a visible indication
6 of what's currently playing.

7 All right. So, now once again I have
8 Figure 1-14 on page 15 of Defendant's Exhibit 3; and it
9 shows you -- it's highlighted -- what's currently
10 playing.

11 Q. And the next claim limitation we're going to talk
12 about, Dr. Wicker?

13 A. The next claim limitation -- let's go to the next
14 slide, please -- is claim 4 which depends on 3. This is
15 the skip forward limitation. So, the processor responds
16 to a skip forward program selection command by stopping
17 what's playing now and moving ahead to what's been
18 chosen.

19 Q. Okay. And claim 5, that's a similar skip demand?

20 A. This is skip backwards. Again, claim 5 depends on
21 claim 4. Basically what you do is you stop what you're
22 playing now and go back and play something that's
23 previously on the playlist.

24 Q. Okay. And how about the asserted claim, claim 6?

25 A. Claim 6 is on the next slide, and this is "skip to

1 previous." The processor responds to a skip backward
2 command, and it involves "has not yet played for said
3 predetermined amount of time for discontinuing the
4 reproduction of the currently playing program and instead
5 continuing the reproduction at the beginning of a program
6 segment which precedes the currently playing program
7 segment."

8 Q. Now, with these claims 4, 5, and 6, these are all
9 either skipping forward or skipping backward; is that
10 right?

11 A. That's correct.

12 Q. And do you find any support in Sound Blaster for
13 the skipping limitations?

14 A. Yes, I do.

15 Q. And where is that, Dr. Wicker?

16 A. If we'll go to the next slide, please.

17 Sound Blaster has a number of controls. Now,
18 this is actually on the screen. Okay? It's not like a
19 stereo sitting in a cabinet or something. It's actually
20 on the screen. But these buttons can be actuated using
21 the mouse. Now, there are a couple buttons, including
22 one for a playlist that I'll point out in a bit. But the
23 ones I want to focus on are these (indicating).

24 This button, it's a left-pointing triangle and
25 a bar -- it plays the previous wav file in the playlist.

1 By the way, wav is an audio format. You'll
2 see that a lot. It's simply saying it's a particular
3 kind of audio file that you can play. In fact, they're
4 still around. You can still see them. Not as popular,
5 but they're around.

6 This one (indicating) plays the next track.
7 It's a triangle pointing to the right with a bar, and it
8 just plays the next track.

9 So, this (indicating) is what's doing the
10 skip -- this is the skip backwards, and that's the skip
11 forwards.

12 Q. Now, those relate to the functions of skipping
13 forward or backward; is that right?

14 A. That's correct.

15 Q. How about the structures for those skip claims?
16 Do you find those in Sound Blaster?

17 A. Okay. I think the structures --

18 THE COURT: Do you want to mention what slide
19 that was?

20 MR. ELACQUA: This is DDX 694 -- let me --

21 THE COURT: Well, in my book it's -- are you
22 sure? Are there two sets with different numbers?

23 MR. ELACQUA: Your Honor, what happened was
24 based upon the discussion this morning, we --

25 THE COURT: Oh, changed some of the numbers.

1 All right.

2 MR. ELACQUA: We didn't have time to print
3 them.

4 THE COURT: Then it probably is even more
5 important to mention the numbers for the record.

6 MR. ELACQUA: I will. Thank you, your Honor.

7 BY MR. ELACQUA:

8 Q. Dr. Wicker, with regard to the structures we
9 talked about before and whether some of the structures
10 were there or some were there based upon your knowledge
11 of being one of skill in the art, does that -- has your
12 opinion changed with respect to the skipping forward or
13 backward commands?

14 A. No. My opinion remains the same. Some of the
15 structure is not there. Particularly the appropriate
16 LocType element is not there.

17 Q. And how about the CurrentPlay and the scanning
18 limitations, that overall software method?

19 A. That overall method, again, is not there. The
20 structures are not there.

21 Q. And --

22 A. Or at least they're not described in the manual.

23 Q. Right. They're not described, but is it still
24 your opinion that the Sound Blaster manual would be
25 obvious?

1 A. Yes. It would still have been obvious to a person
2 of skill to incorporate these things.

3 Q. And I think this is the end of claim 6,
4 Dr. Wicker. What is your opinion with respect to the
5 asserted claim 6 of the Sound Blaster manual?

6 A. Again, everything is not there; but the things
7 that are missing would have been obvious to a person of
8 skill to include. So, overall I found that the claim
9 would have been obvious to a person of skill in the art.

10 Q. Let's move on to some additional claims in the
11 '178 patent, claims 9 and 13. Is that okay?

12 A. That's fine.

13 Q. Okay. Now, again, what types of claims are we
14 talking about here? These are dependent upon what claim?

15 A. Okay. 9 is dependent on claim 1, and 13 is
16 dependent on 9. So, again we have that chain. 13
17 depends on 9 which depends on 1.

18 Q. Okay. Now, Dr. Wicker, do you have an opinion
19 with respect to these two limitations?

20 A. Yes. Audio program -- actually can we go back to
21 the previous slide, please?

22 So, what we have here is a requirement that
23 "collection specified by said sequencing file is selected
24 in accordance with program preference data or program
25 selections accepted from said listener"; and I'll show

1 you where that is.

2 Down here for 13, we have "downloaded from
3 said server computer are selected by said server computer
4 based on data describing the preferences."

5 So, we're going to see 9 -- if we'll go to the
6 next slide.

7 Okay. The Sound Blaster player does use
8 program reference data or program selections in the sense
9 that the user can add wav files to the playlist as he or
10 she wishes or add all of the wav files that have been
11 selected to the playlist. The user is able, on Sound
12 Blaster, to add to the playlist based on whatever you'd
13 like to hear.

14 Q. Now, I noticed in claims 9 and 13, they relate to
15 the downloading again. Dr. Wicker, is it your opinion
16 that Sound Blaster discloses the downloading?

17 A. No, it does not. That goes back to my earlier
18 discussion where you won't find it in Sound Blaster by
19 itself, but Sound Blaster runs on *Windows 95*. So, you go
20 to the *Windows 95* reference; and it tells you about,
21 among other things, FTP.

22 Q. Okay. And what is your opinion, Dr. Wicker,
23 relating to claims 9 and 13 of the '178 patent in regard
24 to Sound Blaster and the *Windows 95* Resource Kit?

25 A. Well, when you combine Sound Blaster with the

1 *Windows 95*, then these claims are obvious. They would
2 have been known -- understandable to a person of skill.
3 A person of skill would have known how to fill in
4 whatever was missing from Sound Blaster.

5 Q. Now, does that conclude the '178 patent?

6 A. Yes, it does.

7 Q. Okay. I apologize. I think that concluded
8 claim 13 of the '178 patent. Is there an additional
9 claim in the '178 patent?

10 A. Yes, there is. Thank you.

11 Q. Okay. And how do you describe that claim,
12 Dr. Wicker?

13 A. Okay. If we can go to the next slide, please.
14 I'm going to do the same thing that I did
15 before so I won't be saying the same things over and over
16 again even more so.

17 Claim 14 has a number of elements that we've
18 already discussed in the context of other claims. So,
19 what I've done here is, for example, audio program
20 player, that's in the '178 patent claim 1.

21 If we look at these first three pieces of the
22 first main element, a memory unit, audio program files,
23 and displayable text, well, those are simply uncontested;
24 but we've talked about them already.

25 We'll have to say a little bit about

1 separately stored playback in a moment.

2 Q. And this is the remaining part of claim 14?

3 A. Yes, it is. We've got -- I didn't think I
4 finished the previous parts.

5 Q. I'm sorry.

6 A. No worries.

7 So, claim 1A deals with the separately
8 storing, the communications port.

9 Claims 9 and 13 of the '178 for the selected
10 by said listener.

11 And then it's uncontested that there's one or
12 more controls.

13 Okay. Next slide, please.

14 Display screen and displayable text, claim 2
15 of the '178.

16 Audio playback, continuously reproducing,
17 claim 1E.

18 Processor for executing, claim 1E.

19 Selected audio program files, discontinue the
20 reproduction of the currently playing file, and instead
21 continue the beginning of said selected audio program
22 file, that's skip to selected, claims 1E and 2.

23 Q. Okay. There are some remaining limitations of the
24 '178 patent?

25 A. There are. Element B, discontinuing, et cetera,

1 the skip forward portion. We talked about that in the
2 context of claim 4 of the '178.

3 Skip to beginning of current, claim 5 of the
4 '178.

5 Q. Okay. And I believe there's one remaining
6 limitation of the '178 patent; is that right?

7 A. Yes, that's right.

8 This is the skip to previous portion, and we
9 discussed that in the context of claim 6 of the '178.

10 Q. Okay. Now, Dr. Wicker, with regard to claim 14 of
11 the '178 patent, what is your opinion relating to Sound
12 Blaster?

13 A. In my opinion it would have been obvious to a
14 person of skill to combine Sound Blaster with *Windows*
15 reference.

16 Q. Okay. How about the '076?

17 A. Okay. So, we're going to do the same thing as we
18 did before.

19 If we could bring up the next slide, please.

20 All right. So, walking through it quickly,
21 the player, '178 claim 1. This is claim 1 of the '076.
22 The first element I talked about in the context of '178
23 claim 1.

24 The means for storing is uncontested.

25 Means for receiving, I talked about that in

1 the context of 1A of the '178.

2 The means for accepting control commands is
3 uncontested.

4 Continuously reproducing, claim 1E of the
5 '178.

6 Means for detecting, uncontested.

7 And then the skip forward portion was
8 discussed in the context of claim 4 of the '178.

9 Q. Now, relating to the downloading again, are all
10 of -- and the means for receiving, was that in the Sound
11 Blaster reference?

12 A. The downloading, no, it was not.

13 Q. Okay. And where do you go to find that?

14 A. The *Windows* reference, the big thick document that
15 tells you all about *Windows 95*.

16 Q. Now, what additional claims in the '076 patent are
17 we going to talk about?

18 A. Okay. If we can go to the next slide, please.

19 Here we have 2 and 3, and we do have to go
20 through several.

21 2, the player, is uncontested. It is a
22 player.

23 The skip to beginning of current, that was
24 talked about in the context of claim 5 of the '178.

25 Going to claim 3, the skip to previous, that

1 was discussed in the context of '178 claim 6.

2 Q. Okay. Now how about claim 14 of the '076 patent?

3 A. Okay. The programmed digital computer, we talked
4 about that in some detail in the context of 1E of the
5 '178.

6 The mass storage device and then the receiving
7 and storing a file of data establishing a sequence, we
8 talked about that in the context of 1A of the '178.

9 And then the rest was uncontested: the input
10 means, the output means, and the processing means.

11 Q. And some remaining limitations in the '076 patent,
12 Dr. Wicker?

13 A. Yes.

14 Q. What are those?

15 A. Next slide, please.

16 We have the skip forward, that was discussed
17 in the context of claim 4; and the skip to beginning of
18 current, that was discussed in the context of claim 5.

19 Q. Okay. And how about the last limitation, which is
20 the asserted claim 15?

21 A. Okay. If we can go to that, please.

22 This is the skip to previous; and, of course,
23 it depends on 14 which we just went through. I discussed
24 the skip to previous in the context of '178 claim 6; and,
25 of course, we talked about '076 claim 14.

1 Q. Now, Dr. Wicker, regarding the Sound Blaster
2 manual, again, what is your opinion with respect to Sound
3 Blaster and the asserted claims of the '076 and
4 '178 patents?

5 A. Okay. Again, some of the elements were missing.
6 Since some of the elements are missing, I can't tell you
7 that Sound Blaster by itself anticipates the asserted
8 claims. But as a person of skill, when you take Sound
9 Blaster and you look to the Windows Resource Kit, the
10 Windows Operating System that's running on your computer,
11 or was in 1995, then it's all there. And this means that
12 to a person of skill, those asserted claims would have
13 been obvious in light of that combination.

14 Q. Thank you, Dr. Wicker.

15 Before we move on, your Honor, I'd like to
16 move for admission as a Rule 1006 summary the slides that
17 relate to the claim limitation and the citations from the
18 references for the DAD manual and the Sound Blaster
19 system.

20 THE COURT: Okay. And, again, I think we
21 discussed this in connection with the other expert. It's
22 one thing to allow them to go back and with proper
23 instructions that they're not evidence as a 1006 summary
24 might be. That's what I thought we had done with the
25 slides on Dr. Almeroth, or his summary.

1 MR. HOLDREITH: Your Honor, the summary for
2 Dr. Almeroth that was admitted, I believe, is a summary
3 of source code where he summarized voluminous source
4 code. There was, I believe --

5 THE COURT: All right. Well, let's take this
6 up after -- we can discuss the exact way it's going to
7 come in or not come in when the jury is gone.

8 MR. ELACQUA: Okay.

9 THE COURT: Let's go ahead and -- if you'll
10 remind me at the close, I'll deal with that.

11 MR. ELACQUA: Thank you, your Honor.

12 BY MR. ELACQUA:

13 Q. And the next section, Dr. Wicker, we're going to
14 talk about, what's the next sort of part of the
15 discussion that we're going to discuss with the jury?

16 A. Okay. So, now I think we're going to move on from
17 obviousness to talk about some other issues.

18 If we could go to the next slide, please.

19 We're going to talk about the general issue of
20 obviousness. I talked a lot about what a person of skill
21 would have known at the time the patent was applied for.
22 And, so, what I'd like to do now is talk generally to
23 show you that some of these concepts were well-known to
24 all of us really back in the '95-'96 time frame.

25 Q. I noticed, Dr. Wicker, this slide has some things

1 that I would say probably predate the '95-'96 time frame;
2 is that right?

3 A. Actually one of them by quite a lot. These are
4 jukeboxes; and the point here is that, you know, we've
5 all known playlists for a long time. The one on the
6 left, I think, is a CD jukebox. You know, it says
7 "Compact Disc." So, this is going back a little bit but
8 not as far as this one (indicating). This one is
9 actually phonograph records.

10 And if you'll recall, when you used a jukebox
11 in the past, you'd go in and put in a nickel or quarter
12 or whatever the case may be and pick a song; and, of
13 course, you weren't the only one doing it. Lots of
14 people were doing it.

15 And what the jukeboxes did and actually still
16 do would keep a queue. In other words, there would be a
17 long playlist of everything everyone had entered and it
18 would slowly work its way through one song at a time and,
19 so, that concept of a playlist goes back -- I've actually
20 seen descriptions of jukeboxes from the 1920s. In fact,
21 there were jukeboxes that played wax cylinders back
22 before there were phonograph records.

23 So, this idea of sequencing what you're going
24 to play is very old, close to 90 years old.

25 Q. Now, how about downloading and storing playlists

1 on audio?

2 A. Okay. That was well-known, too. Basically
3 downloading was part of the original Internet. Long
4 before we were able to use it, long before it was
5 commercial, people were downloading files of various
6 kinds through the Internet. So, it's an old concept.

7 Q. Okay. Now, how about commands like skip forward
8 and skip backward and skip to the previous song? Were
9 those known at the time of the filing of these patents?

10 A. Yes. Well, this has been a basic idea for
11 handheld players for a long time.

12 If you could go to the next slide.

13 This is a note where it talks about skipping
14 forward and backward. This is from a particular
15 reference, Defendant's Exhibit 33, page 18. It's with
16 regard to this player right here (indicating). I think
17 it's a Discman. I can't see it all.

18 But basically if you press this (indicating)
19 button repeatedly, the player locates the previous
20 selections. It skips back.

21 If you press this (indicating) button
22 repeatedly, the player locates the next selections.

23 This has been part of handheld devices,
24 compact disk players, Discmen and whatnot, for quite some
25 time, 20, 30 years.

1 Q. Now, this is a -- you said "a Discman"; is that
2 right?

3 A. Yes.

4 Q. Okay.

5 MR. ELACQUA: And, your Honor, can I approach
6 Dr. Wicker?

7 THE COURT: You may.

8 BY MR. ELACQUA:

9 Q. Dr. Wicker, I'm handing you what's marked as
10 Defendant's Exhibit 32. Describe for the jury what that
11 is, please.

12 A. Yes. This is a nice old Discman. It's a compact
13 disk player. I'll see if I can open it without injuring
14 it. (Demonstrating.)

15 It's got a disk in it. And basically this was
16 one of the original means for playing back CDs using a
17 portable device.

18 Now, the reason we're looking at it is it does
19 have the "skip" buttons on it. Basically you're able to
20 jump around. There is a skip back. It's hard to see,
21 but there is that -- that button right there
22 (indicating), the skip backwards, is right here
23 (indicating). Okay. Again I'm sorry it's so hard to
24 see.

25 That button right there (indicating) is this

1 one (indicating). It's the skip forward.

2 And, so, if I've got a compact disk playing, I
3 can press this button (indicating) repeatedly and it will
4 skip back through the CD. If I press this button
5 (indicating) repeatedly, it will skip forward through
6 the CD.

7 Q. And when you're pressing -- just for the record,
8 Dr. Wicker, describe for the jury what the "skip" buttons
9 look like. Are they something similar to what's on the
10 screen, or is it something different?

11 A. It's exactly what's on the screen. So, this
12 button right here (indicating) -- and I hope you can see
13 it a little bit -- that's right there (indicating).

14 Q. And are those arrows in one direction or the
15 other?

16 A. Yes. I'm sorry. I should have been more
17 specific.

18 So, what I'm highlighting on Exhibit 33 here
19 (indicating) is two left-pointing triangles and a bar.
20 That's skip backwards. That's exactly what's right here
21 (indicating).

22 This one that I'm now highlighting
23 (indicating), again on Exhibit 33, is two right-pointing
24 triangles and a bar. That's skip forwards. That's right
25 here (indicating).

1 Q. Is that -- when you say "right here," is that
2 on -- what exhibit are you looking at and what's the
3 button -- what are the arrows on the button that you're
4 looking at?

5 A. Okay. I'm looking at Defendant's Exhibit 32; and
6 for skip back, I've been pointing to -- how should I
7 describe it? -- top row of buttons on the right side, two
8 left-pointing triangles and a bar.

9 For skip forward I'm looking at the top row
10 all the way over on the right, two right-pointing
11 triangles and a bar.

12 Q. Okay. Now, that's a physical device. Were there
13 other skip commands that might have been on other types
14 of devices?

15 A. Yes. In fact, we've seen examples from Sound
16 Blaster. These commands have been known for many
17 software players of various kinds.

18 This is *Musicshop*. This actually ran on a
19 Macintosh. This is Defendant's Exhibit 2, page 4. And
20 there we see those same buttons. Two left-pointing
21 triangles and a bar is skip backwards; two right-pointing
22 triangles and a bar is skip ahead. These had basically
23 become standardized by the mid Nineties. They were used
24 in a number of different products to mean skip ahead and
25 skip back.

1 Q. And what's the functionality that's described in
2 the Defendant's Exhibit 27?

3 A. Okay. What it says here, "clicking skip ahead
4 will move the cursor and counter to the beginning of the
5 next sequence in the arrangement list. Clicking skip
6 back will place the cursor and counter to the beginning
7 of the current sequence."

8 Q. Now, Dr. Wicker, on the previous exhibit we were
9 looking at -- was that Defendant's Exhibit 32, the
10 Discman?

11 A. Yes.

12 Q. What date is that? Is there a date on the front
13 or the back of that?

14 A. I think there is. There is a manufacture date --
15 it's really hard to see, even with my reading glasses.

16 Q. Is this Defendant's Exhibit 32 right here?

17 A. Yes.

18 THE WITNESS: Oh, thank you.

19 MR. ELACQUA: It's still hard for me to see.
20 Maybe you could blow that up.

21 THE WITNESS: A lot. Okay thank you.

22 A. It says "August, 1993."

23 BY MR. ELACQUA:

24 Q. Okay.

25 A. It's right there.

1 MR. ELACQUA: Thank you, Mr. Barnes.

2 If we could go back to the slides.

3 MR. HOLDREITH: I'm sorry, your Honor. I
4 didn't understand if that's an exhibit that's being
5 offered that we just saw on the screen.

6 THE COURT: I didn't hear it be offered.

7 MR. ELACQUA: Defendant's Exhibit 32, your
8 Honor, is what Dr. Wicker is holding. We'll replace that
9 with a photograph later.

10 BY MR. ELACQUA:

11 Q. Dr. Wicker, now, relating to skip commands, are
12 there some additional technologies we've been talking
13 about today that were available during the time the
14 patents-in-suit were filed?

15 A. That's correct, a great deal of technology
16 actually.

17 Q. And what are some of the additional technologies
18 we've been talking about?

19 A. If we'll go to the next slide, please.

20 This has to do with display screens and
21 scrollable listings providing program description data.
22 All this was known. In fact, what I'm going to quote
23 from here is the actual file history of the '178 patent.
24 This is something called an "Office Action." It's the
25 Patent Office telling the applicant what the Patent

1 Office has decided to do.

2 And what the Patent Office said was, "simple
3 LCD screenings and menus were notoriously well-known to
4 be included on portable music players such as CD players
5 for... showing the time of the track, and other options
6 of the device via menus."

7 So, the Patent Office is basically saying the
8 screens that do these sort of things were very
9 well-known.

10 And, in fact, we have an example right here.
11 This is a screen that, were this actually playing
12 something, would show the selection number and a variety
13 of other information.

14 Q. And when you say "right here," what exhibit are
15 you pointing to, Dr. Wicker?

16 A. I'm sorry. I'm pointing to the screen that's on
17 the front of Defendant's Exhibit 32.

18 Q. Okay. Now, there's something I forgot to discuss.
19 Let me go back real quick. The functionality that's
20 described in this Opcode Musicshop manual, Defendant's
21 Exhibit 27 at page 4, describe for the jury what the
22 functionality relating to these "skip back" buttons
23 regards.

24 A. Okay. Well, basically what they do is they allow
25 you to move through an arrangement list or a playlist,

1 whether skipping backwards or skipping forwards,
2 depending on which button is selected. This (indicating)
3 is skip back, and that's (indicating) skip ahead.

4 Q. And now in the last sentence of that, it says, "If
5 you quickly click again, you will move to the beginning
6 of the previous sequence." What does that mean?

7 A. Okay. So, basically if you just click once on --
8 let's use skip back. If I just click once, I'll skip
9 back once. But if I punch it twice, it will actually go
10 back through the previous and basically move to the
11 beginning of the previous sequence.

12 So, I push it once, it goes back to the
13 beginning of what's playing. I push it again, and it
14 goes back to the previous selection.

15 Q. Okay. And again that's Defendant's Exhibit 27 at
16 page 4.

17 I think we've talked about the display
18 screens. How about some of the other features we've been
19 talking about, such as repeat features?

20 A. Okay. If we can go to the next slide, please.

21 This has to do with repeating playlists at the
22 end of the playlist. In other words, when you get to the
23 end of the playlist, starting over again.

24 And what I found was that that was very
25 well-known. For example, the Discman -- the various

1 versions of the Discmen had a "repeat play" button.

2 Q. Okay. Does that include the Discman you have up
3 there, Defendant's Exhibit 32?

4 A. I believe it does. Let me see if I can find it.

5 Yes. There is a play mode; and I can move the
6 play mode -- this button (indicating) on the bottom
7 left -- to a point where it says "repeat," "repeat play."

8 Q. Okay. Now, Dr. Wicker, is there an additional --
9 any additional references that you are relying on for
10 some of the asserted claims in this case?

11 A. Yes.

12 MR. ELACQUA: Mr. Barnes, can we have
13 Defendant's Exhibit 8, please?

14 BY MR. ELACQUA:

15 Q. What does this reference, Dr. Wicker?

16 A. Okay. This is an article entitled "Architecting
17 Personalized Delivery of Multimedia Information." This
18 is by -- it's the Loeb reference. The first name is
19 Shoshana.

20 MR. ELACQUA: Okay. Mr. Barnes, could you
21 pull up in the bottom there right near the number where
22 it shows you the date?

23 BY MR. ELACQUA:

24 Q. Dr. Wicker, what does this describe?

25 A. Okay. The *Communications of the ACM* is the

1 flagship journal of the Association of Computing
2 Machinery. It's read by literally hundreds of thousands
3 of people.

4 December, 1992, was the particular issue, and
5 then it says Volume 35, Number 12. So, this would have
6 been published to people like me in December, 1992, by
7 the ACM.

8 Q. Okay.

9 MR. ELACQUA: We can go back to the slides,
10 Mr. Barnes. Thank you.

11 BY MR. ELACQUA:

12 Q. And is there a particular section of this Loeb
13 article that you've been looking at?

14 A. Yes, there is. And this is the highlighted
15 portion here (indicating). This is from page 45 of the
16 article -- I should say page 45 of the proceedings.

17 And what's described here is the LyricTime
18 Personalized Music System. Basically what's shown here
19 is that -- the Loeb article is showing that incorporating
20 preferences into a playlist was well-known back in 1992
21 because what's said here is "The LyricTime personalized
22 music system...selects songs from a database and plays
23 them for the listener. More specifically, to select
24 songs from the database, it" -- the music system -- "uses
25 the information filter which implements the model

1 described in the previous section, using descriptions of
2 the songs, a listener profile, and feedback from the
3 listener."

4 So, what this article is saying back in 1992
5 is that it was known to use user preferences to pick
6 songs out from a database so you'd have a playlist that
7 was something a user might want to hear, was more likely
8 to want to hear, because it incorporated his or her
9 preferences.

10 Q. Dr. Wicker, for the record, we're talking about
11 Defendant's Exhibit 8 and that's pages 6 through 7; is
12 that right?

13 A. That's right.

14 Q. Okay.

15 A. The number "45" is the actual journal page.

16 Q. Now, we've just talked about a handful of
17 references, the Loeb article, the Discman, the Discman
18 manual, and some other playlists and things like that.
19 Dr. Wicker, do you have an opinion as to whether some of
20 these references and concepts could be combined with the
21 DAD manual or DAD system and Sound Blaster?

22 A. Yes.

23 Q. And what is that?

24 A. What these show is generally what was known in the
25 art at the time the patent was applied for. All these

1 concepts were known, as we've shown here; so, they all
2 were available to a person of skill to put together with
3 Sound Blaster, for example, to realize the asserted
4 claims in this case.

5 All this stuff was known. A person of skill
6 would have known how to put these things together to find
7 each and every one of the asserted claims in this case.

8 Q. Now, if they did put them together, how does that
9 affect the DAD manual, DAD system, or Sound Blaster?

10 A. Well, if we put them altogether with, for example,
11 Sound Blaster, what it shows is that the claims are
12 obvious.

13 Q. Okay.

14 A. In other words, we're incorporating what a person
15 knows into an existing reference and realizing the
16 invention.

17 Q. Okay. Let's take a look at some more specifics if
18 we can. Okay? Describe for the jury sort of how you
19 laid out some of these rows and columns, please.

20 A. Okay. This is basically my chart that talks about
21 obviousness in terms of some specific concepts. So, here
22 we are in this column (indicating) prior art. These were
23 things like networks, CD players, et cetera, that you
24 could have accessed and learned about, built, played with
25 before the patents were applied for.

1 This column (indicating), the middle column,
2 is specific patent limitations. These are specific
3 requirements called for amongst those patent limitations.
4 These are all things we've talked about.

5 And over here on the right (indicating), these
6 are the specific claims that are affected. In other
7 words, these are the claims that call for these
8 particular limitations.

9 Q. Okay. And, Dr. Wicker, regarding putting some of
10 these things together, what is your basis to put some of
11 these things together?

12 A. Well, the basis for putting them together is first
13 that they're all basically in the same area. They're all
14 dealing with communications, with reproducing music, with
15 creating simple systems that will give a user a
16 particular experience.

17 Q. Okay. If we could just walk through maybe some of
18 the limitations and the claim numbers as to how some of
19 these technologies work. If you could do that. I just
20 want to make sure we have all of this in the record.
21 Let's start with the skip commands, which is the second
22 one down. What limitations do the CD players and things
23 like that affect?

24 A. Okay. So, these skip commands can be found in the
25 '076 patent -- excuse me -- the '076 patent, claims 1, 3,

1 and 15 and the '178 patent, claims 4 through 6 and 14.

2 Q. Okay. Now, how about the display screens with the
3 scrollable listing?

4 A. Okay. So, we talked about display screens with
5 scrollable listings. That would affect the '178 patent,
6 claims 2 and 3.

7 Q. Okay. I think there's a couple more up there,
8 which is regarding the repeat functions. What
9 limitations do those affect?

10 A. Okay. We talked about "repeat at end of
11 playlist." That's going to affect '076 patent claim 1
12 and '178 patent claim 1.

13 Q. Okay. And the references, the Loeb article, what
14 limitations do those specifically discuss?

15 A. Okay. The Loeb article talked about incorporating
16 preferences. That would affect '178 patent claims 9 and
17 13.

18 Q. Okay. Now, Dr. Wicker, I know we've talked before
19 about how this prior art was not before the Patent
20 Office; is that right?

21 A. That's correct.

22 Q. Okay. Now, there was some prior art before the
23 Patent Office with respect to some of these claims. Do
24 you understand that?

25 A. Yes, I do.

1 Q. Okay. Do you have an opinion as to whether any of
2 the prior art we've been discussing today is the same as
3 or how it affects what was already before the Patent
4 Office?

5 A. It's not the same. There's actually more in this
6 prior art than what the Patent Office had in front of it.

7 Q. Now, did the Patent Office have the DAD manual?

8 A. No. It did not have the DAD manual.

9 Q. Now, do you know if it had anything relating to
10 DAD before it, in the '076 or the '178 patents?

11 A. I think in one case there was a brochure for DAD.

12 Q. Okay. Now --

13 A. I'd have to take a look at the listing of the
14 references on the front of the two patents.

15 Q. Sure. We can take a look at it.

16 MR. ELACQUA: Plaintiff's Exhibit 2, please,
17 which I believe is the '178 patent. And I think it's
18 page 2. If you could pull up under "Other Publications."
19 It might go onto the next page, page 3.

20 Go onto the next page, please. Yeah. Under
21 "Other Publications" to the right, Mr. Barnes.

22 There you go.

23 BY MR. ELACQUA:

24 Q. Now, I see right there it says ENCO America. That
25 is Mr. Novacek's company?

1 A. That's correct.

2 Q. Okay. Now, it says "7 unnumbered pages." Do you
3 know whether that is the actual 300-page operators manual
4 we've been talking about today?

5 A. Well, no. It's clearly not. It's simply seven
6 pages. The DAD manual is over 300 pages long.

7 Q. Okay. Do you have an understanding as to whether
8 those two things are the same as each other or the
9 content is the same?

10 A. There's far more content in the DAD manual, which
11 is the point I was making. The DAD manual, for example,
12 has a lot more information than what the Patent Office
13 had. In this case they just had seven pages of product
14 description for DAD.

15 Q. Okay.

16 MR. ELACQUA: We can go back to the slides,
17 Mr. Barnes; and we can finish up here.

18 BY MR. ELACQUA:

19 Q. There are a couple of additional questions you
20 were asked to consider in this case; is that right?

21 A. That's correct.

22 Q. Okay.

23 A. Go on to the next slide, please.

24 It had to do with licenses and patents that
25 were already in existence, in particular what are called

1 "technically comparable Apple patent licenses." I was
2 also asked about Personal Audio's playlist patent.

3 Q. Okay. Let's talk about the first one first, if we
4 could do that. Okay?

5 Are these the two license agreements that you
6 looked at?

7 A. Yes, E-Data and Digeo.

8 Q. Now, just so we're clear here, you're not giving
9 any opinions related to the financial terms or anything
10 like that; is that right?

11 A. Not at all.

12 Q. What did you look at first with E-Data?

13 A. What I looked at, I was simply looking to see if
14 the technology was comparable, in other words, was this
15 something that was comparable to what's being discussed
16 here in court for the last week or two.

17 Q. Okay. And do you have an opinion as to whether
18 the E-Data license has comparable technology to the
19 patents-in-suit?

20 A. Yes. In my opinion it does.

21 Q. Okay. Now let's move on to the next patent, which
22 is the Digeo -- next license, the Digeo patents. Do you
23 have an opinion with respect to the Digeo patents?

24 A. Yes. It would be the same. This is comparable to
25 the patents that are in suit here today. Digeo '823

1 patent describes "Systems and Apparatus For Electronic
2 Communication and Storage of Information." It's an
3 Information distribution system just as has been claimed
4 by the patents we're dealing with in court.

5 Q. Okay. Let me just back up real quick with the
6 E-Data patent. Why is it your opinion that the E-Data is
7 comparable?

8 A. Okay. Same reason. E-Data is a "System for
9 Reproducing Information in Material Objects at a Point of
10 Sale Location." So, basically it's distributing
11 information from a centralized point to a point of sale
12 location.

13 Q. Okay. And I think there was another patent on the
14 Digeo; is that right?

15 A. Yes, there is.

16 Q. And what's your opinion with respect to this
17 patent, Dr. Wicker?

18 A. Okay. This is the Digeo '891 patent, and my
19 conclusion was the same. I think the technology that's
20 described in the Digeo '891 is comparable to what we're
21 discussing here in court.

22 Q. Okay. Now, in the last question, Dr. Wicker --
23 we've heard some about the playlist patent. Do you have
24 an opinion about whether the playlist patent of Mr. Logan
25 is comparable to the patents-in-suit?

1 A. I believe it is comparable, and I think we have a
2 picture of it.

3 What Mr. Logan's patent describes is "methods
4 and apparatus for distributing and using metadata via the
5 Internet." Well, playlists are metadata. Metadata is,
6 of course, more than that. It could include all kinds of
7 information about the material that's going to be played,
8 but I felt that this was comparable based on that
9 distributing metadata over the Internet."

10 MR. ELACQUA: Thank you, your Honor. I pass
11 the witness.

12 THE COURT: Maybe it would be easier for you
13 to start on Tuesday?

14 MR. HOLDREITH: Whatever the court prefers. I
15 can get a few minutes in now, or I can start on Tuesday.

16 THE COURT: I think, ladies and gentlemen,
17 we'll go ahead and -- unless you've got a violent
18 preference.

19 MR. HOLDREITH: No. It's the July 4th
20 weekend, your Honor. I don't think that I would like to
21 hold the ladies and gentlemen up today.

22 THE COURT: Do you have one killer question
23 that you want to just snap out right now?

24 MR. HOLDREITH: No, sir. Thank you.

25 THE COURT: Those killer questions are hard

1 with experts, ladies and gentlemen. I know from personal
2 experience.

3 All right. Ladies and gentlemen, we're going
4 to break for the weekend. One thing that has kept coming
5 up -- and I should have picked up on this earlier -- is
6 this word "algorithm"; and, so, we're going to add a
7 definition to your book on that one. The lawyers and
8 myself and the experts went along all this time. We've
9 all kept using this word, and I suddenly realized that
10 maybe it needs to be defined because it's not necessarily
11 a mathematical formula like some people might think it
12 is. So, if you'll just go ahead and put that in the
13 instructions part of your book.

14 Also, we're now going to have a long weekend
15 and, so, it's especially important that you remember my
16 instructions. Don't go do research or talk to somebody
17 who knows about this or when someone who knows you're on
18 the jury comes up to you and says, "Well, I know all
19 about Apple. Let me show you how to do it" or "talk
20 about it" or whatever, do not get involved in any of
21 that.

22 There may start to be on the Net and in the
23 media some indications or articles that this case is
24 going on. If you start running across something like
25 that, stop reading it and stop looking at it. Don't pay

1 any attention to it.

2 And finally, although it's pretty obvious
3 we're winding down and you've heard testimony from both
4 sides, it's very important that you not start making up
5 your mind. We've got at least one more witness and then
6 finally you have to have my instructions on the law and
7 then you have to know what questions I'm going to ask
8 you. So, you could start making up your mind and you
9 wouldn't even know exactly what question was being asked
10 and that could affect what the question will be.

11 So, please, keep an open mind; and we will --
12 we seem to be right on schedule. We'll start again on
13 Tuesday morning at 8:30. At this time you're excused.

14 (The jury exits the courtroom, 11:57 a.m.)

15 THE COURT: You may step down, sir.

16 THE WITNESS: Thank you, your Honor.

17 THE COURT: All right. So, we have, starting
18 on Tuesday, cross of Dr. Wicker, damages expert from
19 Apple, then Apple will probably rest; is that right?

20 MR. CORDELL: Correct, your Honor.

21 THE COURT: Okay. Then what do you anticipate
22 will be left? Are you going to do a rebuttal on
23 invalidity or --

24 MR. SCHUTZ: Yes, your Honor. We're going to
25 have Dr. Almeroth testify on invalidity and we may have

1 Mr. Call testify as well. If he does, it's going to be
2 relatively short. We've kept him sequestered during the
3 trial in the event we need him for rebuttal.

4 THE COURT: All right. Well, it looks like
5 it's moving along then; and it looks like we will be
6 wrapping up.

7 MR. SCHUTZ: I was just wondering if
8 Mr. Cordell had come up with his four points yet so we
9 can focus on those.

10 THE COURT: Okay. I'm going to be the one who
11 is focusing on those.

12 MR. SCHUTZ: Right. Right. And I promise not
13 to make an hour-and-45-minute JMOL motion, your Honor.

14 THE COURT: Okay. Which of the four are
15 you -- actually I have that written down so that was...

16 MR. CORDELL: So, your Honor, with respect to
17 my priorities and, again, begging the court's indulgence,
18 I don't believe I'm waiving any of my other arguments by
19 offering these priorities but they go in this order.

20 Number 1 is our arguments under the doctrine
21 of equivalents with respect to the '178 patent's
22 communications port limitation.

23 THE COURT: I'm sorry. What? Communications
24 port?

25 MR. CORDELL: Yes.

1 THE COURT: All right. Now -- and I'm
2 sorry -- and I could be told later that I'm wrong by a
3 higher court. But it's this court's opinion -- and I've
4 expressed it before when objections have come up
5 especially as to evidence -- that 20 or 30 objections,
6 just like 20 or 30 JMOLs, basically are nothing. It
7 would be technically possible to JMOL every single word
8 stated by every single witness, and what's the point of
9 having a trial? And especially then since one of the
10 purposes and one of the main purposes of the rule is to
11 allow the plaintiff to fill in what's missing, it becomes
12 an exercise in futility.

13 Now, I well understand the concern that recent
14 cases have raised in defendants about preserving error;
15 but if what the higher court means is that a defendant is
16 now required or allowed to file a JMOL on every single
17 scrap of evidence and if you can do 25 or 30, why can't
18 you do 125 or 2,030 -- and then pick and choose which one
19 will go up to the higher court because they certainly
20 aren't going to take that many, they need to say that.
21 They need to just come out and say that because that's
22 going to start changing, I think, the way these cases are
23 handled.

24 Now, I will agree you're not admitting you're
25 waiving anything; but I want to know -- and not just "in

1 general all my doctrine of equivalents." I want to know
2 which ones you are saying are your top four. If you can
3 show me a real good reason to go with your top five, I
4 will consider it; but given that list, it's my opinion,
5 based on many other cases I've dealt with and the
6 research I've done, that the endless list protocol is the
7 same as not filing any motion at all.

8 And I would not be insulted if you argued that
9 I'm incorrect before the higher court. They may decide
10 differently. But what I want to know is what are your
11 top four or five.

12 MR. CORDELL: Absolutely, your Honor, and I --

13 THE COURT: And I don't want it in terms of
14 just all of your '178 doctrine of equivalents so --

15 MR. CORDELL: I was hoping I was being
16 specific, but apparently I wasn't. Let me start again.

17 THE COURT: All right. Let's get right down
18 to it.

19 MR. CORDELL: We had asked for judgment as a
20 matter of law with respect to the sufficiency of the
21 evidence as to their showing on doctrine of equivalents
22 for the "downloading a plurality of separate digital
23 compressed audio program files of a separate sequencing
24 file" construction, and that was in particular -- that
25 had to do with the request and the request being made as

1 a communication to initiate the transfer.

2 THE COURT: Okay. And the argument there
3 was -- just to be very specific -- was the USB cable is
4 not sending the request as I've defined that; it's just
5 simply an electronic "Here I am" signal.

6 MR. CORDELL: That's right.

7 THE COURT: Okay.

8 MR. CORDELL: And Dr. Almeroth offered no --
9 and really all of Personal Audio offered no opinion or
10 evidence as to equivalents, function-way-result. We
11 heard none of that.

12 THE COURT: All right.

13 MR. CORDELL: So, all we have is the USB. And
14 the court's claim construction, I thought, was very
15 clear, particularly in the clarifying sentence that
16 followed that said simply saying that you're here is not
17 enough.

18 THE COURT: All right.

19 MR. CORDELL: So, that's Number 1.

20 And, your Honor, with that, the court asked
21 the other side to cite some code -- some -- to get some
22 transcript cites for where Dr. Almeroth actually
23 addressed that issue, and I can give the court some
24 additional citations if that would be helpful on this.

25 THE COURT: When we're through here, if you'd

1 go ahead and give the citations to Ms. Mullendore, that
2 may help me review those issues.

3 MR. CORDELL: Thank you.

4 The second one, your Honor, is we believe that
5 Personal Audio didn't put in sufficient evidence to
6 support a finding with respect to the limitation in the
7 court's claim construction relating to the general
8 purpose computer programmed with an algorithm for the
9 skipping structure.

10 Now, it gets complicated; and I apologize
11 about this because that limitation appears over and over
12 and over again throughout the claims. And I have a list
13 of where that limitation appears if that would be
14 helpful. But this is the one your Honor will recall that
15 has the three-step algorithm that says you have to scan
16 forward in the file looking for the Selection_Record with
17 the appropriate LocType, you have to update the
18 CurrentPlay available, and then you go off and, I think,
19 get the program segment. There is a three-step
20 algorithm.

21 THE COURT: And that's related to Figure 5
22 where the various kinds of LocTypes are shown in that
23 figure as an embodiment or the preferred embodiment, and
24 that's part of the structures I identified. And what
25 you're saying, as I understand it, is the accused

1 products just go ahead and go to the next song unless you
2 hit the "skip" button or run the wheel to move forward.

3 MR. CORDELL: Correct. And even when you hit
4 the "skip" button, they don't perform that scanning
5 Selection_Record process that's set forth in that
6 algorithm. And then more importantly, Dr. Almeroth
7 offered us no testimony and really nothing from PA on the
8 equivalents of the claimed algorithm and what's in the
9 accused structures.

10 THE COURT: And just to be clear, I do think
11 it's appropriate that when a term like that is used in
12 many different claims, that you can make the motion as
13 applicable to several different claims. I'm not holding
14 you that just because it appears in lots of them --
15 you're correct. It's the same argument dealing with the
16 same structure that appeared many times. We show that in
17 the chart. So, okay. That's your second one.

18 MR. CORDELL: I have an enumeration if you'd
19 like but --

20 THE COURT: It might not hurt for the record
21 and for my memory if you mentioned the different claims
22 it's in -- or claim elements.

23 MR. CORDELL: It permeates, I believe, all of
24 the claims, your Honor. There are slight variations in
25 the algorithm.

1 THE COURT: Well, let's --

2 MR. CORDELL: For example, if it's skip
3 forward, it says "skip forward"; and if it's skip
4 backward, then it says "skip backward." But then the
5 three-step algorithm follows in each case.

6 THE COURT: Okay. Well, if you -- I think I
7 have it here; but if you've got a specific list, why
8 don't you give it to Ms. Mullendore later because that
9 might play into what I'm doing. Go ahead.

10 MR. CORDELL: Okay. The third one, your
11 Honor, is a related concept but the algorithm is
12 different and it has to do with the repeat all
13 functionality. This appears in claim 1 of the
14 '178 patent. It's the "processor for continuously
15 delivering audio files."

16 And the algorithm is similar but I didn't feel
17 like I could include it as part of the second on the
18 priority list and the algorithm specifically requires
19 steps. When you get to the end of the file, you
20 automatically go up to the beginning based on the
21 Selection_Record that you find at the end of the file.
22 The court will recall that the algorithm says you have to
23 go to the first record in the Selection_Record listing.

24 THE COURT: And the accused products do what?
25 Don't they -- won't they go back to the beginning also?

1 MR. CORDELL: There is a way that they can go
2 back to the beginning but again, your Honor, we have no
3 evidence that the software that's actually used in the
4 accused products is the equivalent of the claimed
5 algorithm and that's the deficiency in the plaintiff's
6 proof.

7 THE COURT: All right.

8 MR. CORDELL: The function is there; but as
9 the *A1-Site* case tells us, of course the function is
10 there. If the function weren't there, we wouldn't be
11 talking about structural equivalents; and, so, they need
12 to make that showing of structural equivalents.

13 THE COURT: All right.

14 MR. CORDELL: And then the fourth one, your
15 Honor, relates to damages; and it is the fact that
16 Personal Audio included nonaccused products -- admitted
17 nonaccused products as part of their damages calculation
18 and apportionment.

19 THE COURT: And specifically when you say
20 "products," you're talking about the *iTunes*?

21 MR. CORDELL: I'm talking about the *iTunes* and
22 the playlists. You'll recall Mr. Nawrocki's slides where
23 he actually relied, for about a third of his damages, on
24 the fact that these playlists were created in the *iTunes*.
25 I think they've said over and over again that those are

1 not accused. There are some other factors that played
2 into that on --

3 THE COURT: All right.

4 MR. CORDELL: That's my four, your Honor. I
5 have a 4.1 just if I might, and that is the court asked
6 me if I had any support for the notion that 100 percent
7 of the profit could not be awarded to the plaintiff and I
8 do. I have two cases for that. One is the
9 *Georgia-Pacific* case itself that says that once they
10 have --

11 THE COURT: Well, it talks -- it does talk
12 about that as a factor. Right. I mean, I'm familiar
13 with that part.

14 MR. CORDELL: And the other is the *Lucent*
15 case, your Honor, *Lucent/Gateway* or what we call
16 "*Lucent/Microsoft*."

17 THE COURT: Just in case -- I think Lucent has
18 been in court more than once. If you have the cite --

19 MR. CORDELL: I'm afraid I don't. I
20 apologize.

21 THE COURT: If it's the -- I mean, we could
22 all say, "Oh, yes, it's the *Lucent* case with which we're
23 all familiar"; but I may be familiar with a different
24 one.

25 MR. CORDELL: I apologize. And in particular,

1 Judge Michel's -- the end of that opinion where he goes
2 through and says very explicitly that it's improper to
3 claim the entire market value and you need to apportion
4 damages and it truly was the foundation of the *Uniloc*
5 opinion. And then at the end he says you can adjust the
6 royalty rate if you apportion correctly; but he makes it
7 very clear that even after you apportion, even after you
8 go through the process, there is still then an allocation
9 of the profits between the accused infringer and the
10 patentee. And the citation, your Honor, is 580 F.3d at
11 1337 or thereabouts.

12 THE COURT: And you think he says you have to
13 allocate it but you may not allocate it 100 percent and
14 0 percent?

15 MR. CORDELL: That's -- well, what he says is
16 after you do the allocation, then you engage in the
17 division between the two parties.

18 THE COURT: Right.

19 MR. CORDELL: There is no suggestion that
20 100 percent would go to --

21 THE COURT: But the question is: Is there a
22 rule that it can't possibly be done?

23 MR. CORDELL: I didn't see that; however --

24 THE COURT: Okay.

25 MR. CORDELL: -- again, I would --

1 THE COURT: I'm just talking about -- there is
2 a difference between it is not allowed and -- it's going
3 to be -- as I put it, it's going to be interesting to see
4 how they support it. Okay? There is a difference.

5 Certain things are not allowed and there are certain
6 things that may be, but you're going to have to show it.

7 Okay. All right. And hopefully by Tuesday
8 you'll have those -- Personal Audio will have those
9 record citations for me to be looking at.

10 MR. HOLDREITH: Yes, sir.

11 THE COURT: Because that would be helpful from
12 your point of view.

13 Anything else, then, since you're standing,
14 that needs to be taken up outside the presence of the
15 jury from Apple's point of view?

16 MR. CORDELL: Other than to thank everyone for
17 all the hard work, no, your Honor. Thank you.

18 THE COURT: Okay. And from Personal Audio's
19 point of view?

20 MR. SCHUTZ: I echo my learned colleague on
21 the other side. Thank you very much, judge. Nothing
22 from us.

23 THE COURT: Okay. Then please drive real
24 safely and be careful over the weekend, and we will see
25 you on Tuesday -- let me just ask. Do you think that the

1 witnesses we have are going to be over on Tuesday or
2 would you likely be -- I mean, we're very likely to be
3 over on Wednesday morning sometime, aren't we, before
4 lunch?

5 MR. SCHUTZ: Certainly by Wednesday morning, I
6 think.

7 MR. CORDELL: And I would be hopeful that it
8 would even be Tuesday, your Honor. We have, I guess,
9 Dr. Wicker's cross and a bit of rebuttal and then our
10 damages expert which won't be more than an hour and a
11 half or two hours in total.


12 MR. SCHUTZ: Yeah. I mean, I've been kind of
13 plotting it out, thinking out loud that there's probably,
14 between cross and redirect --

15 THE COURT: Okay. We can go off the record at
16 this point.

17 (Proceedings adjourned, 12:12 p.m.)

18 COURT REPORTER'S CERTIFICATION

19 I HEREBY CERTIFY THAT ON THIS DATE, JULY 1,
20 2011, THE FOREGOING IS A CORRECT TRANSCRIPT FROM THE
21 RECORD OF PROCEEDINGS.

22 
23 CHRISTINA L. BICKHAM, CRR, RMR

24

25

\$	0	
\$2,000 [1] - 2131:13	0 [1] - 2239:14	2133:2, 2133:25, 2134:1, 2134:9, 2134:11, 2164:6, 2164:8, 2164:9, 2164:20, 2166:12, 2167:8, 2173:8, 2173:11, 2173:20, 2174:8, 2201:17, 2202:2, 2203:10, 2205:2, 2205:23, 2205:25, 2222:1
	1	
<p>'076 [52] - 2089:22, 2089:23, 2090:3, 2090:15, 2091:6, 2092:1, 2092:5, 2096:25, 2097:8, 2099:7, 2112:25, 2117:25, 2125:14, 2125:16, 2128:18, 2131:15, 2132:15, 2132:23, 2133:22, 2136:23, 2138:15, 2138:19, 2138:21, 2139:12, 2167:13, 2167:17, 2169:8, 2169:20, 2170:19, 2170:25, 2171:4, 2172:14, 2173:5, 2173:12, 2173:13, 2173:20, 2174:8, 2174:18, 2175:11, 2178:12, 2178:24, 2203:16, 2203:21, 2204:16, 2205:2, 2205:11, 2205:25, 2206:3, 2221:25, 2222:11, 2223:10</p> <p>'178 [117] - 2089:22, 2090:6, 2090:7, 2090:13, 2090:15, 2091:6, 2091:15, 2092:1, 2096:25, 2097:8, 2098:5, 2098:6, 2098:10, 2098:13, 2110:1, 2111:3, 2111:22, 2112:23, 2113:1, 2131:15, 2134:3, 2134:7, 2134:11, 2136:24, 2139:17, 2140:9, 2141:9, 2141:10, 2141:21, 2145:15, 2146:12, 2153:21, 2155:2, 2155:5, 2155:20, 2156:24, 2160:3, 2160:25, 2162:2, 2162:7, 2162:10, 2163:21, 2164:6, 2164:8, 2164:16, 2165:2, 2165:5, 2165:11, 2165:18, 2165:19, 2165:23, 2166:1, 2166:3, 2166:8, 2166:10, 2166:14, 2166:21, 2166:22, 2167:2, 2167:4, 2167:7, 2167:10, 2167:12, 2168:3, 2168:5, 2168:8, 2168:15, 2171:8, 2171:12, 2173:12, 2174:2, 2174:5, 2174:18, 2175:11, 2178:12, 2179:16, 2180:23, 2181:20, 2185:12, 2186:14, 2193:18, 2199:11, 2200:23, 2201:5, 2201:8, 2201:9, 2201:20, 2202:9, 2202:15, 2202:24, 2203:2, 2203:4, 2203:6, 2203:9, 2203:11, 2203:21, 2203:22, 2204:1, 2204:5, 2204:8, 2204:24, 2205:1, 2205:5, 2205:8, 2205:24, 2206:4, 2214:23, 2222:1, 2222:5, 2222:12, 2222:16, 2223:10, 2223:17, 2230:21, 2232:14, 2236:14</p> <p>'823 [1] - 2225:25</p> <p>'891 [2] - 2226:18, 2226:20</p> <p>'93 [1] - 2138:13</p> <p>'94-'95 [1] - 2142:12</p> <p>'95 [3] - 2137:10, 2138:17, 2178:22</p> <p>'95-'96 [2] - 2207:24, 2208:1</p> <p>'96 [4] - 2138:14, 2138:24, 2139:7, 2178:24</p> <p>'next' [2] - 2154:16, 2161:12</p>	<p>1 [101] - 2075:1, 2075:2, 2075:3, 2075:4, 2075:5, 2076:2, 2090:2, 2090:3, 2090:8, 2090:12, 2093:15, 2097:7, 2097:8, 2098:6, 2099:7, 2100:4, 2100:6, 2100:8, 2100:13, 2104:21, 2109:25, 2110:22, 2111:3, 2111:22, 2112:20, 2112:23, 2112:25, 2113:1, 2118:5, 2118:15, 2119:12, 2125:14, 2128:18, 2132:23, 2133:1, 2133:10, 2133:12, 2133:13, 2133:14, 2133:15, 2133:18, 2134:7, 2134:8, 2134:15, 2134:18, 2135:10, 2140:9, 2140:20, 2142:18, 2145:15, 2146:24, 2147:5, 2147:21, 2151:5, 2153:4, 2153:21, 2154:12, 2155:3, 2155:5, 2155:7, 2155:10, 2156:7, 2160:6, 2161:7, 2162:7, 2162:11, 2162:12, 2162:15, 2163:5, 2164:16, 2168:3, 2169:21, 2169:23, 2171:1, 2171:5, 2179:16, 2181:3, 2181:5, 2187:9, 2193:18, 2193:23, 2194:2, 2194:9, 2194:11, 2194:19, 2199:15, 2199:17, 2201:20, 2203:21, 2203:23, 2221:25, 2222:11, 2222:12, 2230:20, 2233:19, 2236:13, 2241:19</p> <p>1-14 [3] - 2182:14, 2187:2, 2195:8</p> <p>1-5 [1] - 2181:11</p> <p>1.0 [1] - 2178:4</p> <p>1.5 [1] - 2181:11</p> <p>10 [5] - 2082:25, 2099:1, 2115:8, 2122:5, 2188:24</p> <p>100 [3] - 2238:6, 2239:13, 2239:20</p> <p>1006 [2] - 2206:16, 2206:23</p> <p>103 [2] - 2098:23, 2128:8</p> <p>107 [2] - 2147:20, 2153:5</p> <p>108 [2] - 2154:13, 2161:6</p> <p>10:46 [1] - 2180:1</p> <p>10:47 [1] - 2180:11</p> <p>11 [1] - 2123:25</p> <p>111 [2] - 2163:4, 2163:6</p> <p>11:00 [3] - 2179:25, 2180:10, 2180:11</p> <p>11:57 [1] - 2229:14</p> <p>12 [3] - 2082:25, 2123:25, 2218:5</p> <p>125 [1] - 2231:18</p> <p>12:12 [1] - 2241:17</p> <p>13 [19] - 2099:1, 2135:5, 2135:7, 2135:10, 2135:11, 2162:14, 2162:15, 2163:20, 2165:5, 2199:11, 2199:15, 2199:16, 2200:2, 2200:14, 2200:23, 2201:8, 2202:9, 2222:17</p> <p>1337 [1] - 2239:11</p> <p>14 [34] - 2090:9, 2090:13, 2098:12, 2109:25, 2110:23, 2111:3, 2111:22, 2112:22, 2112:25, 2125:16, 2132:23,</p>	<p>15 [10] - 2133:21, 2133:23, 2134:1, 2174:8, 2187:3, 2187:5, 2194:16, 2195:8, 2205:20, 2222:1</p> <p>16 [7] - 2085:6, 2140:19, 2150:19, 2151:19, 2156:7, 2181:14, 2187:20</p> <p>176 [1] - 2124:25</p> <p>178 [1] - 2168:4</p> <p>18 [1] - 2209:15</p> <p>183 [1] - 2144:2</p> <p>1920s [1] - 2208:20</p> <p>1992 [4] - 2218:4, 2218:6, 2218:20, 2219:4</p> <p>1993 [1] - 2213:22</p> <p>1994-'95 [1] - 2150:12</p> <p>1995 [5] - 2177:13, 2177:21, 2177:22, 2178:5, 2206:11</p> <p>1A [12] - 2141:9, 2145:16, 2164:22, 2165:2, 2168:5, 2173:13, 2181:20, 2181:21, 2185:13, 2202:7, 2204:1, 2205:8</p> <p>1B [4] - 2145:19, 2146:12, 2164:22</p> <p>1C [1] - 2146:15</p> <p>1D [1] - 2092:1</p> <p>1E [12] - 2092:2, 2166:1, 2166:2, 2166:8, 2168:8, 2171:4, 2173:12, 2202:17, 2202:18, 2202:22, 2204:4, 2205:4</p>
		2
		<p>2 [34] - 2075:15, 2079:17, 2133:13, 2133:15, 2133:17, 2133:19, 2134:14, 2134:15, 2134:18, 2134:23, 2141:10, 2153:14, 2156:1, 2156:3, 2156:13, 2156:15, 2165:23, 2166:8, 2170:25, 2171:2, 2172:13, 2194:11, 2194:18, 2195:4, 2202:14, 2202:22, 2204:19, 2204:21, 2212:19, 2222:6, 2223:16, 2223:18</p> <p>2,030 [1] - 2231:18</p> <p>20 [7] - 2076:8, 2077:17, 2083:17, 2164:15, 2209:25, 2231:5, 2231:6</p> <p>200 [1] - 2127:25</p> <p>2000-2001 [2] - 2117:14, 2121:7</p> <p>2001 [3] - 2131:6, 2138:21, 2139:4</p> <p>2002 [1] - 2138:14</p> <p>2011 [2] - 2076:2, 2241:20</p> <p>2153 [1] - 2075:1</p> <p>2154 [1] - 2075:2</p> <p>2156 [1] - 2075:3</p> <p>2161 [1] - 2075:4</p> <p>2163 [1] - 2075:5</p> <p>2176 [1] - 2075:6</p> <p>2181 [1] - 2075:7</p>

<p>2182 [1] - 2075:8 2187 [1] - 2075:9 2194 [1] - 2075:10 2195 [1] - 2075:11 2209 [1] - 2075:12 221 [2] - 2142:3, 2144:1 2210 [1] - 2075:13 2212 [2] - 2075:14, 2075:15 2213 [3] - 2075:16, 2075:17, 2075:18 2214 [1] - 2075:19 2215 [2] - 2075:20, 2075:21 2216 [1] - 2075:22 2217 [2] - 2075:23, 2075:24 2219 [1] - 2075:25 25 [4] - 2124:16, 2124:17, 2181:12, 2231:17 27 [7] - 2075:16, 2075:21, 2075:22, 2086:7, 2213:2, 2215:21, 2216:15 283 [1] - 2144:1 2B [1] - 2156:14</p>	<p>2195:21, 2196:8, 2203:2, 2204:8, 2205:17, 2212:19, 2215:21, 2216:16, 2222:1 4.1 [1] - 2238:5 40 [1] - 2093:14 400 [3] - 2121:7, 2121:8, 2121:10 42 [2] - 2093:14, 2122:4 424 [1] - 2094:12 427 [1] - 2106:10 44 [1] - 2119:13 45 [3] - 2218:15, 2218:16, 2219:15 46 [1] - 2106:10 463 [1] - 2132:10 47 [1] - 2098:23 4th [1] - 2227:19</p>	<p>2217:13, 2219:11 80 [1] - 2122:15 800 [1] - 2122:19 803(6) [1] - 2078:9 80486DX [1] - 2150:11 83 [1] - 2145:24 88 [1] - 2085:1 897 [1] - 2078:7 8:23 [1] - 2076:2 8:30 [1] - 2229:13 8:34 [1] - 2080:19</p>
3	5	9
<p>3 [43] - 2075:6, 2075:7, 2075:8, 2075:9, 2075:10, 2075:11, 2086:9, 2086:20, 2092:8, 2114:1, 2114:2, 2133:17, 2133:19, 2134:15, 2134:16, 2134:19, 2134:23, 2153:15, 2156:24, 2156:25, 2157:13, 2157:14, 2170:25, 2171:2, 2171:9, 2172:14, 2176:21, 2177:15, 2181:10, 2182:14, 2182:24, 2187:2, 2187:21, 2194:16, 2195:3, 2195:4, 2195:8, 2195:14, 2204:19, 2204:25, 2221:25, 2222:6, 2223:19 30 [7] - 2077:17, 2079:12, 2164:15, 2209:25, 2231:5, 2231:6, 2231:17 300 [2] - 2127:25, 2224:6 300-page [1] - 2224:3 310 [2] - 2142:3, 2150:7 314 [1] - 2146:18 315 [1] - 2151:5 32 [14] - 2075:13, 2075:14, 2075:17, 2075:18, 2075:19, 2075:20, 2075:23, 2210:10, 2212:5, 2213:9, 2213:16, 2214:7, 2215:17, 2217:3 33 [4] - 2075:12, 2209:15, 2211:18, 2211:23 330 [3] - 2143:8, 2143:12, 2152:5 35 [2] - 2093:14, 2218:5 351 [1] - 2092:9 380 [3] - 2092:10, 2093:5, 2093:6</p>	<p>5 [39] - 2082:4, 2082:9, 2084:4, 2088:22, 2088:25, 2092:4, 2092:13, 2092:14, 2092:17, 2093:4, 2096:14, 2098:23, 2122:12, 2122:13, 2131:11, 2134:16, 2134:17, 2134:19, 2134:24, 2135:1, 2135:2, 2159:15, 2160:5, 2160:8, 2160:25, 2166:21, 2171:7, 2174:5, 2181:12, 2187:20, 2194:8, 2195:19, 2195:20, 2196:8, 2203:3, 2204:24, 2205:18, 2234:21 50 [4] - 2077:13, 2142:19, 2142:22, 2150:11 51 [1] - 2098:24 53 [2] - 2098:23, 2098:24 57 [1] - 2119:13 580 [1] - 2239:10</p>	<p>9 [27] - 2075:7, 2099:15, 2135:7, 2135:8, 2135:10, 2135:11, 2162:10, 2162:14, 2162:15, 2163:20, 2165:5, 2176:20, 2176:21, 2181:10, 2199:11, 2199:15, 2199:16, 2199:17, 2200:5, 2200:14, 2200:23, 2202:9, 2222:16 9-pin [1] - 2151:11 90 [1] - 2208:24 92 [1] - 2150:17 93 [2] - 2163:5, 2163:13 95 [13] - 2177:12, 2180:7, 2182:6, 2183:18, 2183:20, 2184:25, 2185:3, 2189:11, 2200:19, 2200:20, 2200:24, 2201:1, 2204:15 97 [1] - 2128:12 9:31 [1] - 2129:21 9:32 [1] - 2129:24 9:46 [1] - 2129:24 9:47 [1] - 2130:7</p>
4	6	A
<p>4 [30] - 2085:16, 2114:2, 2118:17, 2121:9, 2121:10, 2134:15, 2134:16, 2134:19, 2134:23, 2135:2, 2153:15, 2157:14, 2160:6, 2160:25, 2166:15, 2168:14, 2174:2, 2194:9, 2195:14,</p>	<p>6 [31] - 2090:9, 2090:12, 2098:24, 2118:15, 2134:16, 2134:20, 2134:22, 2135:1, 2135:3, 2155:18, 2155:23, 2160:3, 2160:7, 2160:25, 2162:2, 2162:4, 2167:2, 2171:12, 2171:14, 2194:4, 2194:8, 2195:24, 2195:25, 2196:8, 2199:3, 2199:5, 2203:9, 2205:1, 2205:24, 2219:11, 2222:1 67 [1] - 2147:20 69 [2] - 2143:8, 2143:9 694 [1] - 2197:20</p>	<p>a.m [9] - 2080:19, 2129:21, 2129:24, 2130:7, 2180:1, 2180:11, 2229:14 A.M [1] - 2076:2 ability [5] - 2090:19, 2097:20, 2124:9, 2126:9, 2136:9 able [14] - 2076:8, 2106:1, 2121:21, 2124:9, 2155:6, 2174:13, 2174:24, 2175:17, 2181:1, 2191:11, 2200:11, 2209:4, 2210:19 absolutely [6] - 2077:10, 2077:25, 2082:23, 2083:1, 2128:1, 2232:12 ACC [1] - 2117:13 accelerate [2] - 2127:22, 2128:3 accelerated [1] - 2127:13 accelerating [1] - 2127:6 accepted [5] - 2157:18, 2160:9, 2162:13, 2162:22, 2199:25 accepting [9] - 2125:10, 2125:12, 2125:13, 2125:15, 2165:7, 2168:6, 2173:15, 2188:1, 2204:2 access [3] - 2140:24, 2143:13, 2184:12 accessed [1] - 2220:24 accessible [1] - 2078:7</p>
	7	
	<p>7 [5] - 2076:2, 2099:1, 2119:13, 2219:11, 2224:2 781 [1] - 2078:7</p>	
	8	
	<p>8 [5] - 2075:24, 2075:25, 2122:16,</p>	

<p>accidentally [1] - 2081:18</p> <p>accomplished [1] - 2172:6</p> <p>accordance [1] - 2199:24</p> <p>according [4] - 2091:18, 2097:24, 2106:2, 2165:15</p> <p>accordingly [1] - 2192:25</p> <p>account [1] - 2193:24</p> <p>accurate [1] - 2123:13</p> <p>accused [35] - 2081:22, 2083:22, 2089:14, 2090:14, 2093:18, 2093:21, 2096:6, 2109:4, 2110:12, 2110:24, 2111:11, 2111:18, 2112:5, 2115:10, 2115:13, 2118:17, 2118:21, 2120:13, 2120:14, 2125:21, 2129:8, 2131:18, 2131:21, 2134:8, 2134:10, 2190:5, 2190:14, 2191:4, 2191:6, 2234:25, 2235:9, 2236:24, 2237:4, 2238:1, 2239:9</p> <p>ACM [2] - 2217:25, 2218:7</p> <p>Action [1] - 2214:24</p> <p>actual [7] - 2121:24, 2146:20, 2160:4, 2170:8, 2214:23, 2219:15, 2224:3</p> <p>actuate [1] - 2154:2</p> <p>actuated [1] - 2196:20</p> <p>actuates [1] - 2086:21</p> <p>adapter [1] - 2151:3</p> <p>add [10] - 2114:25, 2163:12, 2175:20, 2176:3, 2183:14, 2185:1, 2200:9, 2200:10, 2200:12, 2228:6</p> <p>addition [1] - 2172:8</p> <p>additional [22] - 2111:23, 2133:3, 2135:18, 2159:21, 2160:15, 2162:12, 2165:10, 2168:16, 2169:7, 2170:19, 2173:4, 2183:17, 2186:4, 2199:10, 2201:8, 2204:16, 2214:12, 2214:17, 2217:8, 2217:9, 2224:19, 2233:24</p> <p>address [2] - 2103:7, 2143:15</p> <p>addressed [1] - 2233:23</p> <p>adjourned [1] - 2241:17</p> <p>adjust [1] - 2239:5</p> <p>adjusting [1] - 2187:18</p> <p>admission [1] - 2206:16</p> <p>admissions [1] - 2087:16</p> <p>admitted [2] - 2207:2, 2237:16</p> <p>admitting [1] - 2231:24</p> <p>advanced [1] - 2117:12</p> <p>advertising [1] - 2103:10</p> <p>affect [8] - 2190:3, 2220:9, 2221:23, 2222:5, 2222:9, 2222:11, 2222:16, 2229:10</p> <p>affected [1] - 2221:6</p> <p>affects [2] - 2132:18, 2223:3</p> <p>affidavit [1] - 2078:13</p> <p>afraid [1] - 2238:19</p> <p>ago [4] - 2118:19, 2164:15, 2166:8, 2173:16</p> <p>agree [3] - 2107:2, 2127:3, 2231:24</p> <p>agreements [1] - 2225:5</p> <p>ahead [20] - 2080:22, 2088:1, 2129:19, 2130:8, 2144:7, 2144:8, 2149:22,</p>	<p>2154:1, 2182:4, 2195:17, 2207:9, 2212:22, 2212:24, 2213:3, 2216:3, 2227:17, 2228:12, 2234:1, 2235:1, 2236:9</p> <p>air [3] - 2144:23, 2145:3, 2146:3</p> <p>AI [1] - 2237:9</p> <p>AI-Site [1] - 2237:9</p> <p>algorithm [25] - 2147:14, 2158:7, 2158:8, 2160:21, 2160:22, 2171:23, 2188:10, 2188:12, 2189:14, 2190:20, 2193:12, 2228:6, 2234:8, 2234:15, 2234:20, 2235:6, 2235:8, 2235:25, 2236:5, 2236:11, 2236:16, 2236:18, 2236:22, 2237:5</p> <p>algorithms [1] - 2158:2</p> <p>alignment [2] - 2123:14, 2124:8</p> <p>ALL [1] - 2076:4</p> <p>allocate [2] - 2239:13</p> <p>allocation [2] - 2239:8, 2239:16</p> <p>allow [5] - 2106:5, 2116:18, 2206:22, 2215:24, 2231:11</p> <p>allowed [4] - 2149:18, 2231:16, 2240:2, 2240:5</p> <p>allows [3] - 2113:12, 2114:12, 2163:24</p> <p>Almeroth [6] - 2206:25, 2207:2, 2229:25, 2233:8, 2233:22, 2235:6</p> <p>Almeroth's [1] - 2126:20</p> <p>almost [5] - 2076:19, 2076:20, 2076:21, 2149:21</p> <p>alone [1] - 2185:24</p> <p>altogether [1] - 2220:10</p> <p>Amanda [2] - 2094:10, 2095:20</p> <p>Amazon [2] - 2102:14, 2104:2</p> <p>amazon.com [2] - 2103:1, 2103:2</p> <p>America [1] - 2223:24</p> <p>amount [6] - 2131:11, 2176:10, 2176:11, 2192:2, 2192:3, 2196:3</p> <p>analog [4] - 2150:15, 2151:10, 2151:12, 2151:22</p> <p>analysis [2] - 2134:4, 2136:17</p> <p>announcements [1] - 2103:10</p> <p>answer [2] - 2164:3, 2183:15</p> <p>answers [3] - 2085:8, 2087:1, 2132:13</p> <p>anticipate [2] - 2140:6, 2229:21</p> <p>anticipated [5] - 2155:10, 2155:11, 2170:17, 2190:7</p> <p>anticipates [4] - 2139:19, 2139:24, 2175:10, 2206:7</p> <p>anticipation [8] - 2139:22, 2140:1, 2175:5, 2175:25, 2185:17, 2185:20, 2185:24</p> <p>anytime [1] - 2106:20</p> <p>anyway [2] - 2103:4, 2113:19</p> <p>apologize [5] - 2109:17, 2201:7, 2234:10, 2238:20, 2238:25</p> <p>Apparatus [1] - 2226:1</p> <p>apparatus [1] - 2227:4</p> <p>Appeals [1] - 2077:17</p> <p>appeared [2] - 2077:4, 2235:16</p> <p>appellate [1] - 2077:19</p>	<p>Apple [7] - 2082:25, 2085:5, 2124:16, 2225:1, 2228:19, 2229:19</p> <p>APPLE [1] - 2076:1</p> <p>Apple's [1] - 2240:15</p> <p>applicable [1] - 2235:13</p> <p>applicant [1] - 2214:25</p> <p>application [6] - 2085:16, 2085:21, 2086:8, 2138:19, 2140:3, 2155:9</p> <p>applied [7] - 2139:12, 2142:23, 2177:4, 2178:24, 2207:21, 2219:25, 2220:25</p> <p>applying [2] - 2179:6, 2179:13</p> <p>apportion [3] - 2239:3, 2239:6, 2239:7</p> <p>apportionment [1] - 2237:18</p> <p>appreciate [1] - 2077:11</p> <p>approach [1] - 2210:5</p> <p>appropriate [9] - 2084:8, 2084:9, 2158:10, 2160:24, 2161:19, 2161:22, 2198:15, 2234:17, 2235:11</p> <p>Architecting [1] - 2217:16</p> <p>archives [1] - 2079:14</p> <p>area [4] - 2124:21, 2163:6, 2163:15, 2221:13</p> <p>argued [2] - 2111:7, 2232:8</p> <p>argument [4] - 2164:17, 2191:3, 2233:2, 2235:15</p> <p>arguments [7] - 2077:7, 2112:2, 2112:6, 2165:21, 2174:9, 2230:18, 2230:20</p> <p>arrangement [2] - 2213:5, 2215:25</p> <p>arrogant [1] - 2077:6</p> <p>arrows [3] - 2082:7, 2211:14, 2212:3</p> <p>art [15] - 2121:21, 2137:12, 2140:7, 2170:7, 2177:3, 2192:1, 2193:21, 2198:11, 2199:9, 2219:25, 2220:22, 2222:19, 2222:22, 2223:2, 2223:6</p> <p>article [8] - 2217:16, 2218:13, 2218:16, 2218:19, 2219:4, 2219:17, 2222:13, 2222:15</p> <p>articles [2] - 2137:20, 2228:23</p> <p>asserted [33] - 2097:19, 2133:4, 2134:24, 2136:19, 2136:23, 2137:25, 2155:13, 2155:16, 2155:17, 2160:4, 2162:2, 2162:6, 2164:5, 2167:7, 2167:10, 2174:18, 2174:20, 2174:25, 2175:9, 2175:11, 2185:22, 2185:23, 2190:7, 2194:4, 2195:24, 2199:5, 2205:20, 2206:3, 2206:7, 2206:12, 2217:10, 2220:3, 2220:7</p> <p>assist [1] - 2148:21</p> <p>associated [6] - 2092:24, 2153:23, 2159:8, 2161:8, 2164:12, 2172:7</p> <p>Association [1] - 2218:1</p> <p>attachment [1] - 2079:16</p> <p>attachments [1] - 2078:17</p> <p>Attachments [1] - 2079:12</p> <p>attention [1] - 2229:1</p> <p>audible [1] - 2173:17</p> <p>audience [1] - 2176:12</p> <p>Audio [5] - 2188:8, 2233:9, 2234:5, 2237:16, 2240:8</p>
--	---	--

<p>audio [68] - 2099:18, 2099:22, 2103:10, 2113:12, 2117:12, 2117:13, 2119:25, 2133:24, 2137:3, 2140:9, 2140:14, 2140:16, 2140:22, 2140:24, 2141:2, 2142:15, 2142:21, 2142:23, 2143:13, 2144:5, 2144:13, 2146:15, 2146:19, 2150:6, 2151:3, 2153:25, 2156:16, 2157:2, 2157:20, 2157:22, 2160:7, 2162:11, 2162:17, 2164:14, 2164:22, 2165:4, 2165:24, 2166:4, 2166:5, 2166:7, 2166:14, 2166:19, 2167:1, 2167:25, 2173:9, 2181:5, 2181:14, 2181:17, 2181:19, 2182:4, 2187:9, 2187:11, 2188:15, 2192:15, 2192:16, 2193:7, 2197:1, 2197:3, 2199:20, 2201:19, 2201:22, 2202:16, 2202:19, 2202:21, 2209:1, 2232:23, 2236:15</p> <p>AUDIO [1] - 2076:1</p> <p>Audio's [3] - 2136:22, 2225:2, 2240:18</p> <p>August [2] - 2138:17, 2213:22</p> <p>authority [2] - 2076:10, 2077:23</p> <p>automatically [3] - 2148:6, 2185:2, 2236:20</p> <p>automobile [1] - 2119:17</p> <p>available [8] - 2104:13, 2140:2, 2142:25, 2144:9, 2183:23, 2214:13, 2220:2, 2234:18</p> <p>awarded [1] - 2238:7</p> <p style="text-align: center;">B</p> <p>background [2] - 2144:6, 2176:14</p> <p>backward [13] - 2154:21, 2159:18, 2160:9, 2160:22, 2171:19, 2196:1, 2196:9, 2197:13, 2198:13, 2209:8, 2209:14, 2236:4</p> <p>backwards [13] - 2109:2, 2110:13, 2110:16, 2159:16, 2160:13, 2161:16, 2193:1, 2195:20, 2197:10, 2210:22, 2211:20, 2212:21, 2216:1</p> <p>bar [11] - 2152:23, 2154:15, 2161:12, 2196:25, 2197:7, 2211:19, 2211:24, 2212:8, 2212:11, 2212:21, 2212:22</p> <p>Barnes [14] - 2092:16, 2093:11, 2095:14, 2176:21, 2177:6, 2177:14, 2177:24, 2178:7, 2214:1, 2217:12, 2217:20, 2218:10, 2223:21, 2224:17</p> <p>based [11] - 2076:25, 2110:17, 2149:16, 2162:18, 2197:24, 2198:10, 2200:4, 2200:12, 2227:8, 2232:5, 2236:20</p> <p>basic [5] - 2114:7, 2117:10, 2126:8, 2150:12, 2209:10</p> <p>basics [1] - 2103:25</p> <p>basis [4] - 2076:20, 2079:10, 2221:10, 2221:12</p> <p>batteries [1] - 2095:11</p> <p>battery [3] - 2123:24, 2124:3, 2124:4</p> <p>beam [2] - 2121:24, 2123:14</p> <p>BEAUMONT [1] - 2076:3</p>	<p>become [1] - 2212:23</p> <p>becomes [1] - 2231:11</p> <p>begging [1] - 2230:17</p> <p>begin [3] - 2143:11, 2147:25, 2153:8</p> <p>beginning [34] - 2077:2, 2094:3, 2100:17, 2157:21, 2158:25, 2159:1, 2160:12, 2166:6, 2166:18, 2166:20, 2166:21, 2166:25, 2168:13, 2171:3, 2171:7, 2171:10, 2173:24, 2174:1, 2174:3, 2174:4, 2193:9, 2196:5, 2202:21, 2203:3, 2204:23, 2205:17, 2213:4, 2213:6, 2216:5, 2216:11, 2216:13, 2236:20, 2236:25, 2237:2</p> <p>below [1] - 2177:23</p> <p>best [2] - 2077:6, 2121:10</p> <p>Best [1] - 2117:18</p> <p>better [1] - 2116:19</p> <p>between [4] - 2239:9, 2239:17, 2240:2, 2241:14</p> <p>big [13] - 2090:24, 2091:12, 2102:21, 2102:22, 2105:21, 2114:5, 2115:6, 2115:7, 2121:19, 2123:19, 2133:1, 2148:2, 2204:14</p> <p>bigger [2] - 2105:22, 2127:15</p> <p>billion [1] - 2122:13</p> <p>bit [21] - 2078:11, 2081:5, 2082:5, 2084:16, 2086:10, 2088:7, 2106:23, 2113:16, 2115:2, 2116:5, 2116:7, 2117:22, 2119:1, 2158:21, 2158:22, 2169:25, 2196:22, 2201:25, 2208:7, 2211:13, 2241:9</p> <p>bits [4] - 2083:3, 2121:8, 2150:19, 2151:19</p> <p>black [2] - 2154:15, 2156:11</p> <p>Blaster [109] - 2137:8, 2175:14, 2175:15, 2175:16, 2175:18, 2175:21, 2175:24, 2176:3, 2176:18, 2176:25, 2177:1, 2177:11, 2178:10, 2178:15, 2178:23, 2179:2, 2179:5, 2179:7, 2179:14, 2179:18, 2179:21, 2180:4, 2180:19, 2181:1, 2181:4, 2181:8, 2181:14, 2181:15, 2181:18, 2181:23, 2182:5, 2182:13, 2182:16, 2182:18, 2182:19, 2182:23, 2183:1, 2183:3, 2183:6, 2183:14, 2183:18, 2184:25, 2185:1, 2185:13, 2185:24, 2186:8, 2186:11, 2186:19, 2186:20, 2186:24, 2186:25, 2187:6, 2187:15, 2188:4, 2188:9, 2188:20, 2189:4, 2189:10, 2189:17, 2189:25, 2190:4, 2190:10, 2190:11, 2190:24, 2191:1, 2191:4, 2191:5, 2191:9, 2191:17, 2191:18, 2192:14, 2192:15, 2192:16, 2192:21, 2193:3, 2193:20, 2193:22, 2194:14, 2194:15, 2196:12, 2196:17, 2197:16, 2198:24, 2199:5, 2200:7, 2200:12, 2200:16, 2200:18, 2200:19, 2200:24, 2200:25, 2201:4, 2203:12, 2203:14, 2204:11, 2206:1, 2206:3, 2206:7, 2206:9, 2206:18, 2212:16, 2219:21, 2220:3, 2220:9, 2220:11</p>	<p>blocked [1] - 2123:5</p> <p>blow [5] - 2085:15, 2092:11, 2092:12, 2095:15, 2213:20</p> <p>blow-upable [1] - 2092:12</p> <p>board [1] - 2100:6</p> <p>boards [2] - 2116:11, 2116:22</p> <p>Boettcher [4] - 2082:22, 2086:9, 2088:17, 2094:19</p> <p>Boettcher's [1] - 2084:13</p> <p>book [6] - 2170:7, 2183:20, 2183:22, 2197:21, 2228:7, 2228:13</p> <p>books [1] - 2103:3</p> <p>bottom [10] - 2081:15, 2091:10, 2091:21, 2093:2, 2093:4, 2096:16, 2137:6, 2177:17, 2217:6, 2217:21</p> <p>box [8] - 2094:16, 2094:18, 2094:19, 2094:22, 2094:24, 2101:2, 2102:12, 2156:11</p> <p>brains [1] - 2101:10</p> <p>break [6] - 2076:17, 2077:8, 2129:18, 2129:20, 2179:23, 2228:4</p> <p>Bridges [4] - 2094:9, 2095:8, 2095:20</p> <p>briefing [1] - 2077:15</p> <p>bring [6] - 2079:4, 2080:2, 2080:5, 2173:7, 2180:4, 2203:19</p> <p>brings [1] - 2077:17</p> <p>brochure [1] - 2223:11</p> <p>brought [1] - 2100:6</p> <p>browse [1] - 2184:3</p> <p>browser [1] - 2103:1</p> <p>build [3] - 2082:13, 2082:15, 2106:2</p> <p>Building [4] - 2094:9, 2095:8, 2095:20</p> <p>builds [1] - 2106:15</p> <p>built [3] - 2088:16, 2182:7, 2220:24</p> <p>bullet [4] - 2116:6, 2116:8, 2116:10, 2117:6</p> <p>bunch [4] - 2114:23, 2125:24, 2134:14, 2194:6</p> <p>buried [1] - 2076:11</p> <p>bus [2] - 2106:16, 2113:18</p> <p>business [2] - 2078:24, 2079:8</p> <p>button [23] - 2086:21, 2086:23, 2086:24, 2143:10, 2145:2, 2154:16, 2154:17, 2161:13, 2196:24, 2209:19, 2209:21, 2210:21, 2210:25, 2211:3, 2211:4, 2211:12, 2212:3, 2216:2, 2217:1, 2217:6, 2235:2, 2235:4</p> <p>buttons [7] - 2196:20, 2196:21, 2210:19, 2211:8, 2212:7, 2212:20, 2215:22</p> <p>Buy [1] - 2117:18</p> <p>buy [1] - 2103:3</p> <p>BY [42] - 2081:2, 2085:3, 2085:18, 2086:12, 2088:6, 2092:3, 2093:3, 2093:16, 2094:13, 2095:22, 2099:8, 2100:12, 2104:19, 2106:11, 2109:21, 2122:6, 2125:1, 2130:10, 2131:5, 2132:11, 2136:1, 2139:3, 2143:2, 2148:18, 2149:5, 2149:24, 2176:23, 2177:8, 2177:16, 2178:1, 2178:9,</p>
--	---	---

<p>2180:17, 2198:7, 2207:12, 2210:8, 2213:23, 2214:10, 2217:14, 2217:23, 2218:11, 2223:23, 2224:18</p> <p>bytes [1] - 2122:13</p> <p style="text-align: center;">C</p> <p>cabinet [1] - 2196:19</p> <p>cable [16] - 2101:14, 2102:2, 2107:8, 2108:1, 2120:16, 2120:20, 2120:21, 2120:23, 2124:3, 2142:8, 2142:9, 2142:10, 2145:8, 2233:3</p> <p>cables [1] - 2105:9</p> <p>calculation [1] - 2237:17</p> <p>callout [1] - 2092:4</p> <p>cannot [5] - 2116:2, 2133:20, 2135:11, 2190:7</p> <p>capability [3] - 2124:1, 2124:2, 2140:23</p> <p>capable [1] - 2127:7</p> <p>capacitors [1] - 2114:20</p> <p>car [4] - 2119:19, 2119:22, 2120:8, 2120:21</p> <p>card [36] - 2112:16, 2112:18, 2113:4, 2113:15, 2113:19, 2113:21, 2114:7, 2114:12, 2115:2, 2115:11, 2115:21, 2116:1, 2116:2, 2116:3, 2116:13, 2116:19, 2117:2, 2117:14, 2117:15, 2137:9, 2150:4, 2150:20, 2150:21, 2150:23, 2151:3, 2151:8, 2151:21, 2151:22, 2177:1, 2177:2, 2181:14, 2181:15, 2189:4, 2189:10</p> <p>cards [14] - 2112:18, 2113:5, 2113:24, 2114:4, 2114:6, 2114:16, 2114:23, 2115:7, 2116:3, 2116:20, 2117:9, 2117:11, 2150:5</p> <p>care [1] - 2111:21</p> <p>careful [1] - 2240:24</p> <p>cartridge [2] - 2129:7, 2169:5</p> <p>cascading [1] - 2134:21</p> <p>case [38] - 2076:25, 2077:11, 2078:7, 2080:13, 2086:23, 2087:19, 2087:25, 2129:3, 2130:4, 2132:3, 2135:14, 2136:23, 2138:9, 2139:19, 2144:16, 2145:6, 2156:23, 2171:22, 2175:8, 2176:8, 2177:4, 2179:9, 2190:8, 2190:13, 2208:12, 2217:10, 2220:4, 2220:7, 2223:11, 2224:13, 2224:20, 2228:23, 2236:5, 2237:9, 2238:9, 2238:15, 2238:17, 2238:22</p> <p>cases [5] - 2081:22, 2231:14, 2231:22, 2232:5, 2238:8</p> <p>catalog [2] - 2079:13, 2079:15</p> <p>category [1] - 2163:11</p> <p>causes [1] - 2092:20</p> <p>CD [7] - 2181:17, 2208:6, 2211:4, 2211:6, 2215:4, 2220:23, 2221:22</p> <p>CD-quality [1] - 2181:17</p> <p>CD/DAT [1] - 2140:21</p> <p>CDs [1] - 2210:16</p> <p>central [1] - 2101:9</p>	<p>centralized [1] - 2226:11</p> <p>certain [9] - 2085:12, 2103:7, 2112:3, 2176:10, 2176:11, 2192:2, 2192:3, 2240:5</p> <p>certainly [7] - 2076:9, 2096:11, 2109:20, 2131:20, 2156:19, 2231:19, 2241:5</p> <p>CERTIFICATION [1] - 2241:18</p> <p>CERTIFY [1] - 2241:19</p> <p>cetera [5] - 2126:19, 2135:2, 2169:4, 2202:25, 2220:23</p> <p>chain [1] - 2199:16</p> <p>change [5] - 2096:19, 2107:10, 2123:4, 2123:11, 2152:25</p> <p>changed [3] - 2084:17, 2197:25, 2198:12</p> <p>changer [1] - 2123:3</p> <p>changing [1] - 2231:22</p> <p>channel [3] - 2123:3, 2123:4, 2123:11</p> <p>character [1] - 2163:15</p> <p>charge [5] - 2123:20, 2124:3, 2124:9, 2124:10</p> <p>charging [1] - 2123:24</p> <p>chart [2] - 2220:20, 2235:17</p> <p>chip [13] - 2101:8, 2114:15, 2114:18, 2115:16, 2115:20, 2115:25, 2116:1, 2116:2, 2116:18, 2116:19, 2117:3</p> <p>chips [9] - 2113:21, 2114:15, 2115:24, 2116:3, 2116:11, 2116:16, 2116:20, 2116:22</p> <p>choice [5] - 2094:2, 2096:1, 2096:16, 2124:15, 2163:24</p> <p>choices [1] - 2118:18</p> <p>choose [1] - 2231:18</p> <p>chosen [3] - 2131:12, 2156:17, 2195:18</p> <p>circuit [1] - 2115:18</p> <p>Circuit [3] - 2077:12, 2077:15, 2117:19</p> <p>citation [2] - 2186:25, 2239:10</p> <p>citations [6] - 2112:21, 2143:24, 2206:17, 2233:24, 2234:1, 2240:9</p> <p>cite [5] - 2093:7, 2093:13, 2144:10, 2233:21, 2238:18</p> <p>cites [4] - 2099:6, 2144:1, 2148:22, 2233:22</p> <p>city [1] - 2145:10</p> <p>City [1] - 2117:19</p> <p>claim [255] - 2076:19, 2076:20, 2089:20, 2090:2, 2090:3, 2090:8, 2090:9, 2090:11, 2091:19, 2092:1, 2092:2, 2097:7, 2097:8, 2098:6, 2098:9, 2098:12, 2098:18, 2099:13, 2099:16, 2105:1, 2109:6, 2109:11, 2110:9, 2110:20, 2110:22, 2110:23, 2111:10, 2111:13, 2112:4, 2112:20, 2112:22, 2112:23, 2113:1, 2118:5, 2118:11, 2118:23, 2118:24, 2120:2, 2125:14, 2125:16, 2128:15, 2128:18, 2128:23, 2128:25, 2131:22, 2132:23, 2132:25, 2133:10, 2133:12, 2133:13, 2133:14, 2133:15, 2133:17, 2133:18, 2133:19,</p>	<p>2133:21, 2133:23, 2133:25, 2134:7, 2134:8, 2134:9, 2134:11, 2134:14, 2134:15, 2134:16, 2134:22, 2135:5, 2135:7, 2139:17, 2140:6, 2140:7, 2140:9, 2141:9, 2141:11, 2141:12, 2141:16, 2142:20, 2143:1, 2145:15, 2147:5, 2153:21, 2153:23, 2155:3, 2155:5, 2155:7, 2155:10, 2155:14, 2155:16, 2155:17, 2155:18, 2155:21, 2155:23, 2156:1, 2156:3, 2156:13, 2156:15, 2156:24, 2156:25, 2157:13, 2157:14, 2158:5, 2159:15, 2159:21, 2160:3, 2160:4, 2160:6, 2160:7, 2160:8, 2160:15, 2160:18, 2162:2, 2162:4, 2162:7, 2162:10, 2162:11, 2162:12, 2162:14, 2164:5, 2164:6, 2164:8, 2164:9, 2164:12, 2164:16, 2164:20, 2165:2, 2165:18, 2165:23, 2166:1, 2166:12, 2166:15, 2166:21, 2167:2, 2167:8, 2168:3, 2168:4, 2168:14, 2168:23, 2169:19, 2169:21, 2169:23, 2170:14, 2170:15, 2170:22, 2171:1, 2171:2, 2171:4, 2171:5, 2171:7, 2171:9, 2171:12, 2171:14, 2172:25, 2173:5, 2173:8, 2173:11, 2173:12, 2173:13, 2173:20, 2174:2, 2174:5, 2174:8, 2175:6, 2178:20, 2179:12, 2179:16, 2179:20, 2181:3, 2181:5, 2181:20, 2181:21, 2187:9, 2190:8, 2191:12, 2193:18, 2193:23, 2194:2, 2194:3, 2194:4, 2194:11, 2194:18, 2194:19, 2195:3, 2195:4, 2195:11, 2195:13, 2195:14, 2195:19, 2195:20, 2195:21, 2195:24, 2195:25, 2199:3, 2199:5, 2199:8, 2199:14, 2199:15, 2201:8, 2201:9, 2201:11, 2201:17, 2201:20, 2202:2, 2202:7, 2202:14, 2202:17, 2202:18, 2203:2, 2203:3, 2203:9, 2203:10, 2203:21, 2203:23, 2204:4, 2204:8, 2204:24, 2204:25, 2205:1, 2205:2, 2205:17, 2205:18, 2205:20, 2205:24, 2205:25, 2206:17, 2221:18, 2222:11, 2222:12, 2233:14, 2234:7, 2235:22, 2236:13, 2239:3</p> <p>claimed [3] - 2226:3, 2235:8, 2237:4</p> <p>claims [97] - 2090:5, 2090:12, 2097:9, 2097:19, 2097:21, 2098:1, 2109:25, 2110:18, 2111:1, 2111:3, 2111:22, 2112:12, 2112:25, 2132:15, 2132:17, 2132:19, 2132:22, 2133:1, 2133:3, 2133:4, 2133:7, 2133:8, 2133:9, 2134:5, 2134:12, 2134:13, 2134:14, 2136:19, 2136:23, 2137:15, 2137:23, 2137:25, 2140:5, 2141:21, 2155:24, 2160:25, 2161:2, 2162:6, 2163:20, 2164:10, 2164:22, 2165:5, 2166:8, 2167:7, 2167:10, 2167:19, 2170:17, 2170:19, 2170:25, 2172:13, 2173:4, 2174:18, 2174:20, 2174:25, 2175:2, 2175:9, 2175:11, 2178:20, 2179:11, 2180:25, 2185:23, 2190:6, 2190:7, 2192:11,</p>
---	---	--

<p>2194:7, 2196:8, 2197:15, 2199:10, 2199:11, 2199:13, 2200:14, 2200:23, 2201:1, 2201:18, 2202:9, 2202:22, 2204:16, 2206:3, 2206:8, 2206:12, 2217:10, 2220:4, 2220:7, 2220:11, 2221:6, 2221:7, 2221:25, 2222:1, 2222:6, 2222:16, 2222:23, 2234:12, 2235:12, 2235:13, 2235:21, 2235:24</p> <p>clarification [1] - 2172:20</p> <p>clarify [1] - 2176:6</p> <p>clarifying [1] - 2233:15</p> <p>CLARK [1] - 2076:3</p> <p>classic [1] - 2085:16</p> <p>clear [8] - 2080:12, 2099:3, 2147:2, 2191:17, 2225:8, 2233:15, 2235:10, 2239:7</p> <p>clearly [6] - 2079:6, 2141:1, 2145:17, 2181:9, 2187:18, 2224:5</p> <p>CLERK [1] - 2079:25</p> <p>click [7] - 2103:2, 2103:4, 2104:4, 2104:5, 2216:5, 2216:7, 2216:8</p> <p>clicking [2] - 2213:3, 2213:5</p> <p>client [3] - 2104:1, 2104:2, 2106:22</p> <p>client-server [1] - 2104:1</p> <p>close [2] - 2207:10, 2208:24</p> <p>coax [1] - 2142:10</p> <p>code [7] - 2084:17, 2084:20, 2086:2, 2122:11, 2207:3, 2207:4, 2233:21</p> <p>codec [3] - 2115:16, 2115:17</p> <p>coder/decoder [1] - 2115:18</p> <p>coding [2] - 2115:19, 2117:13</p> <p>colleague [1] - 2240:20</p> <p>collect [1] - 2114:23</p> <p>collection [2] - 2085:22, 2199:23</p> <p>collections [1] - 2079:14</p> <p>colors [1] - 2114:9</p> <p>column [4] - 2093:14, 2220:22, 2221:1</p> <p>Column [4] - 2098:23, 2098:24, 2099:1, 2119:13</p> <p>columns [1] - 2220:19</p> <p>combination [3] - 2168:1, 2194:2, 2206:13</p> <p>combine [6] - 2173:1, 2185:15, 2186:5, 2186:7, 2200:25, 2203:14</p> <p>combined [3] - 2175:23, 2185:13, 2219:20</p> <p>combining [1] - 2172:21</p> <p>coming [2] - 2134:12, 2228:4</p> <p>command [12] - 2103:5, 2145:4, 2154:3, 2157:15, 2157:18, 2160:9, 2168:9, 2171:19, 2171:21, 2172:1, 2195:16, 2196:2</p> <p>commands [15] - 2085:22, 2165:7, 2168:6, 2171:7, 2173:15, 2173:23, 2188:1, 2198:13, 2204:2, 2209:7, 2212:13, 2212:16, 2214:11, 2221:21, 2221:24</p> <p>comment [1] - 2159:9</p> <p>commercial [1] - 2209:5</p> <p>common [1] - 2107:20</p>	<p>communication [4] - 2100:1, 2105:4, 2182:7, 2233:1</p> <p>Communication [1] - 2226:2</p> <p>Communications [1] - 2217:25</p> <p>communications [14] - 2119:18, 2119:23, 2119:24, 2141:13, 2141:14, 2141:25, 2142:2, 2165:1, 2181:21, 2186:17, 2202:8, 2221:14, 2230:22, 2230:23</p> <p>Compact [1] - 2208:7</p> <p>compact [3] - 2209:24, 2210:12, 2211:2</p> <p>companies [1] - 2106:5</p> <p>company [2] - 2105:25, 2223:25</p> <p>comparable [10] - 2225:1, 2225:14, 2225:15, 2225:18, 2225:24, 2226:7, 2226:20, 2226:25, 2227:1, 2227:8</p> <p>compare [1] - 2137:22</p> <p>compared [1] - 2096:5</p> <p>completely [2] - 2109:2, 2110:15</p> <p>complicated [1] - 2234:10</p> <p>components [1] - 2114:19</p> <p>compressed [12] - 2081:23, 2082:3, 2088:11, 2088:24, 2089:3, 2099:17, 2099:22, 2142:15, 2142:21, 2162:16, 2182:4, 2232:23</p> <p>compression [4] - 2142:20, 2142:22, 2142:23, 2142:24</p> <p>comprising [2] - 2167:25, 2181:6</p> <p>computer [60] - 2088:19, 2101:6, 2101:10, 2101:11, 2101:12, 2101:13, 2102:25, 2103:7, 2104:25, 2105:6, 2107:5, 2107:9, 2107:11, 2107:20, 2108:16, 2108:18, 2108:21, 2110:11, 2110:12, 2113:15, 2113:16, 2113:20, 2113:22, 2114:13, 2116:12, 2116:16, 2116:22, 2116:23, 2119:17, 2119:19, 2123:23, 2133:24, 2137:9, 2144:22, 2144:23, 2146:4, 2146:5, 2150:4, 2150:9, 2150:12, 2160:21, 2162:17, 2162:18, 2171:22, 2172:3, 2173:9, 2182:19, 2184:11, 2186:21, 2186:24, 2188:3, 2189:3, 2189:9, 2189:12, 2200:3, 2205:3, 2206:10, 2234:8</p> <p>computers [7] - 2099:19, 2099:24, 2101:6, 2102:21, 2114:25, 2126:19, 2182:5</p> <p>Computing [1] - 2218:1</p> <p>concept [3] - 2208:19, 2209:6, 2236:11</p> <p>concepts [4] - 2207:23, 2219:20, 2220:1, 2220:21</p> <p>concern [1] - 2231:13</p> <p>conclude [3] - 2130:4, 2155:2, 2201:5</p> <p>concluded [1] - 2201:7</p> <p>concludes [4] - 2135:13, 2167:12, 2172:13, 2193:18</p> <p>conclusion [3] - 2174:16, 2174:24, 2226:19</p> <p>confused [2] - 2109:16, 2140:4</p> <p>confusing [1] - 2100:23</p>	<p>connect [13] - 2102:5, 2106:1, 2106:24, 2107:4, 2107:11, 2107:19, 2108:6, 2108:14, 2116:11, 2116:20, 2117:4, 2120:21, 2191:11</p> <p>connection [13] - 2102:6, 2102:9, 2113:12, 2113:13, 2119:5, 2119:9, 2120:7, 2120:16, 2123:15, 2142:11, 2142:13, 2206:21</p> <p>connector [8] - 2113:9, 2113:11, 2114:10, 2116:14, 2151:11, 2151:12</p> <p>connectors [9] - 2113:6, 2113:7, 2113:8, 2114:8, 2116:16, 2151:9, 2151:10, 2151:13, 2151:21</p> <p>connects [4] - 2113:15, 2113:19, 2119:23, 2119:24</p> <p>consider [3] - 2131:6, 2224:20, 2232:4</p> <p>considered [5] - 2124:13, 2127:11, 2137:14, 2137:17, 2178:10</p> <p>consisting [1] - 2129:4</p> <p>consists [1] - 2102:18</p> <p>construction [26] - 2089:20, 2091:19, 2097:24, 2098:18, 2099:14, 2105:2, 2112:4, 2118:23, 2118:25, 2120:2, 2129:1, 2131:23, 2141:13, 2141:16, 2158:5, 2159:21, 2160:16, 2160:18, 2168:18, 2168:20, 2169:19, 2171:16, 2179:12, 2232:24, 2233:14, 2234:7</p> <p>constructions [2] - 2141:11, 2179:7</p> <p>construed [2] - 2110:10, 2118:12</p> <p>consumer [1] - 2117:17</p> <p>contain [1] - 2163:15</p> <p>content [3] - 2140:16, 2224:9, 2224:10</p> <p>contents [1] - 2163:6</p> <p>contested [1] - 2165:8</p> <p>context [15] - 2119:14, 2165:5, 2201:18, 2203:2, 2203:9, 2203:22, 2204:1, 2204:8, 2204:24, 2205:1, 2205:4, 2205:8, 2205:17, 2205:18, 2205:24</p> <p>continue [5] - 2148:3, 2165:17, 2180:14, 2191:16, 2202:21</p> <p>CONTINUED [1] - 2081:1</p> <p>continuing [12] - 2157:16, 2157:21, 2160:12, 2166:6, 2166:14, 2166:18, 2166:25, 2168:12, 2173:24, 2173:25, 2193:8, 2196:5</p> <p>continuous [2] - 2091:12, 2189:1</p> <p>continuously [13] - 2091:10, 2091:15, 2091:16, 2093:1, 2112:24, 2147:18, 2165:24, 2168:8, 2188:13, 2188:14, 2202:16, 2204:4, 2236:14</p> <p>contrary [1] - 2077:23</p> <p>control [6] - 2094:1, 2168:6, 2172:5, 2173:15, 2173:23, 2204:2</p> <p>controller [1] - 2106:18</p> <p>Controller [1] - 2106:19</p> <p>controlling [1] - 2188:2</p> <p>controls [11] - 2147:3, 2147:6, 2147:8, 2154:2, 2156:18, 2165:6, 2188:1, 2188:2, 2188:9, 2196:17, 2202:12</p>
--	---	--

<p>conventional ^[1] - 2169:3</p> <p>conversion ^[1] - 2151:22</p> <p>converter ^[4] - 2115:16, 2150:6, 2150:18</p> <p>copies ^[1] - 2144:5</p> <p>copyright ^[1] - 2177:18</p> <p>copyrighted ^[1] - 2177:21</p> <p>Cordell ^[3] - 2076:7, 2135:24, 2230:8</p> <p>CORDELL ^[35] - 2076:14, 2077:10, 2077:25, 2130:4, 2135:22, 2229:20, 2230:16, 2230:25, 2232:12, 2232:15, 2232:19, 2233:6, 2233:8, 2233:13, 2233:19, 2234:3, 2235:3, 2235:18, 2235:23, 2236:2, 2236:10, 2237:1, 2237:8, 2237:14, 2237:21, 2238:4, 2238:14, 2238:19, 2238:25, 2239:15, 2239:19, 2239:23, 2239:25, 2240:16, 2241:7</p> <p>correct ^[34] - 2086:5, 2088:10, 2089:10, 2098:8, 2111:8, 2118:2, 2130:16, 2131:3, 2137:13, 2139:6, 2140:11, 2141:19, 2141:23, 2147:12, 2147:15, 2154:5, 2158:3, 2160:17, 2171:15, 2172:15, 2180:20, 2182:22, 2189:6, 2189:16, 2189:24, 2196:11, 2197:14, 2214:15, 2222:21, 2224:1, 2224:21, 2229:20, 2235:3, 2235:15</p> <p>CORRECT ^[1] - 2241:20</p> <p>correctly ^[2] - 2078:15, 2239:6</p> <p>cost ^[1] - 2131:13</p> <p>counsel ^[5] - 2088:1, 2129:17, 2130:8, 2149:22, 2179:22</p> <p>counter ^[2] - 2213:4, 2213:6</p> <p>country ^[1] - 2102:4</p> <p>couple ^[10] - 2085:19, 2107:25, 2117:22, 2118:19, 2132:21, 2167:19, 2176:7, 2196:21, 2222:7, 2224:19</p> <p>coupled ^[1] - 2186:17</p> <p>course ^[10] - 2078:24, 2078:25, 2079:8, 2138:20, 2156:4, 2205:22, 2205:25, 2208:13, 2227:6, 2237:9</p> <p>Court ^[1] - 2077:17</p> <p>court ^[32] - 2076:22, 2097:24, 2099:9, 2110:10, 2110:23, 2111:12, 2118:12, 2129:25, 2131:22, 2137:4, 2142:5, 2143:7, 2146:8, 2146:9, 2152:10, 2156:10, 2169:15, 2171:20, 2180:12, 2225:16, 2226:4, 2226:21, 2227:14, 2231:3, 2231:15, 2231:19, 2232:9, 2233:20, 2233:23, 2236:22, 2238:5, 2238:18</p> <p>COURT ^[91] - 2076:4, 2076:6, 2076:16, 2077:14, 2078:2, 2079:23, 2080:1, 2080:8, 2080:16, 2080:20, 2085:14, 2086:25, 2087:4, 2087:6, 2087:9, 2087:15, 2100:9, 2104:17, 2109:18, 2129:17, 2129:22, 2130:2, 2130:6, 2130:8, 2130:21, 2131:1, 2131:4, 2135:19, 2135:21, 2135:23, 2138:25, 2148:13, 2148:24, 2149:2, 2149:4, 2149:9, 2179:22, 2180:2, 2180:9,</p>	<p>2180:14, 2197:18, 2197:21, 2197:25, 2198:4, 2206:20, 2207:5, 2207:9, 2210:7, 2214:6, 2227:12, 2227:16, 2227:22, 2227:25, 2229:15, 2229:17, 2229:21, 2230:4, 2230:10, 2230:14, 2230:23, 2231:1, 2232:13, 2232:17, 2233:2, 2233:7, 2233:12, 2233:18, 2233:25, 2234:21, 2235:10, 2235:20, 2236:1, 2236:6, 2236:24, 2237:7, 2237:13, 2237:19, 2238:3, 2238:11, 2238:17, 2238:21, 2239:12, 2239:18, 2239:21, 2239:24, 2240:1, 2240:11, 2240:18, 2240:23, 2241:15, 2241:18</p> <p>court's ^[12] - 2099:13, 2105:1, 2118:23, 2128:25, 2165:21, 2169:19, 2176:15, 2179:12, 2230:17, 2231:3, 2233:14, 2234:7</p> <p>courtroom ^[5] - 2080:19, 2129:21, 2130:7, 2180:1, 2229:14</p> <p>cover ^[1] - 2165:12</p> <p>covered ^[1] - 2167:22</p> <p>created ^[1] - 2237:24</p> <p>creates ^[1] - 2088:23</p> <p>creating ^[1] - 2221:15</p> <p>cross ^[3] - 2229:18, 2241:9, 2241:14</p> <p>cryptic ^[1] - 2143:14</p> <p>cumbersome ^[1] - 2120:22</p> <p>current ^[10] - 2094:7, 2095:6, 2095:18, 2166:21, 2174:3, 2188:25, 2203:3, 2204:23, 2205:18, 2213:7</p> <p>CurrentPlay ^[12] - 2152:15, 2152:24, 2153:11, 2190:22, 2191:7, 2191:8, 2191:10, 2191:19, 2191:22, 2192:7, 2198:17, 2234:18</p> <p>cursor ^[2] - 2213:4, 2213:6</p> <p>cut ^[13] - 2087:20, 2147:22, 2147:25, 2148:6, 2152:11, 2152:22, 2153:5, 2153:7, 2154:14, 2161:7, 2161:11, 2161:14, 2161:15</p> <p>cuts ^[7] - 2143:13, 2143:17, 2143:18, 2144:13, 2163:8, 2163:15, 2165:16</p> <p>cylinders ^[1] - 2208:21</p>	<p>2163:20, 2164:1, 2167:11, 2169:11, 2169:21, 2169:24, 2170:1, 2170:5, 2170:9, 2171:25, 2172:5, 2172:17, 2172:18, 2174:6, 2174:7, 2174:10, 2174:11, 2174:12, 2174:14, 2174:16, 2174:17, 2174:21, 2174:23, 2175:1, 2175:9, 2175:10, 2179:1, 2179:8, 2179:14, 2206:18, 2219:21, 2220:9, 2223:7, 2223:8, 2223:10, 2223:11, 2224:6, 2224:10, 2224:11, 2224:14</p> <p>damages ^[8] - 2076:20, 2130:2, 2229:18, 2237:15, 2237:17, 2237:23, 2239:4, 2241:10</p> <p>Data ^[6] - 2225:7, 2225:12, 2225:18, 2226:6, 2226:8</p> <p>data ^[27] - 2082:19, 2082:20, 2106:19, 2106:20, 2107:15, 2108:7, 2108:10, 2108:11, 2119:4, 2121:6, 2129:4, 2130:18, 2141:14, 2142:20, 2142:22, 2152:6, 2162:18, 2165:13, 2165:15, 2168:22, 2168:24, 2169:3, 2199:24, 2200:4, 2200:8, 2205:7, 2214:21</p> <p>database ^[19] - 2081:12, 2081:20, 2082:11, 2082:13, 2082:20, 2083:2, 2083:12, 2084:2, 2084:4, 2088:11, 2088:16, 2088:17, 2088:19, 2088:24, 2089:3, 2218:22, 2218:24, 2219:6</p> <p>date ^[16] - 2138:14, 2138:18, 2138:20, 2138:23, 2139:4, 2139:9, 2139:11, 2139:12, 2140:3, 2155:9, 2178:16, 2213:12, 2213:14, 2217:22</p> <p>DATE ^[1] - 2241:19</p> <p>dates ^[1] - 2178:15</p> <p>days ^[4] - 2101:16, 2114:4, 2117:22, 2118:19</p> <p>DB ^[3] - 2081:19, 2081:21, 2150:17</p> <p>DDX ^[3] - 2094:12, 2132:10, 2197:20</p> <p>deal ^[3] - 2087:21, 2207:10, 2214:15</p> <p>dealing ^[4] - 2150:11, 2221:14, 2226:4, 2235:15</p> <p>deals ^[2] - 2166:12, 2202:7</p> <p>dealt ^[2] - 2167:18, 2232:5</p> <p>December ^[2] - 2218:4, 2218:6</p> <p>decide ^[2] - 2108:16, 2232:9</p> <p>decided ^[1] - 2215:1</p> <p>declaration ^[1] - 2078:2</p> <p>decoding ^[1] - 2115:19</p> <p>deep ^[1] - 2101:8</p> <p>default ^[2] - 2094:16, 2094:19</p> <p>defendant ^[1] - 2231:15</p> <p>Defendant's ^[63] - 2075:1, 2075:2, 2075:3, 2075:4, 2075:5, 2075:6, 2075:7, 2075:8, 2075:9, 2075:10, 2075:11, 2075:12, 2075:13, 2075:14, 2075:15, 2075:16, 2075:17, 2075:18, 2075:19, 2075:20, 2075:21, 2075:22, 2075:23, 2075:24, 2075:25, 2079:11, 2079:17, 2106:9, 2122:4, 2124:25, 2128:8, 2128:11, 2140:20, 2142:17, 2146:24, 2147:21, 2151:5, 2153:4, 2154:12, 2156:7, 2161:6, 2163:5, 2176:20,</p>
D		
<p>D-to-A ^[2] - 2150:18</p> <p>DAD ^[109] - 2137:3, 2138:4, 2138:8, 2138:15, 2139:16, 2139:19, 2139:21, 2140:18, 2140:20, 2141:1, 2141:3, 2141:4, 2142:1, 2142:3, 2142:6, 2142:15, 2142:25, 2143:21, 2143:24, 2144:19, 2145:16, 2145:17, 2145:18, 2145:22, 2145:25, 2146:8, 2146:9, 2146:16, 2146:18, 2146:23, 2147:3, 2147:4, 2147:16, 2147:21, 2150:2, 2150:8, 2150:21, 2150:22, 2151:5, 2152:1, 2152:5, 2153:1, 2153:3, 2153:17, 2154:7, 2154:8, 2155:5, 2155:7, 2155:8, 2156:8, 2157:6, 2158:13, 2158:23, 2161:1, 2162:3,</p>		

<p>2176:21, 2181:10, 2182:24, 2187:20, 2194:16, 2195:8, 2209:15, 2210:10, 2212:5, 2212:19, 2213:2, 2213:9, 2213:16, 2214:7, 2215:17, 2215:20, 2216:15, 2217:3, 2217:13, 2219:11</p> <p>defendants [1] - 2231:14</p> <p>deficiencies [1] - 2076:23</p> <p>deficiency [1] - 2237:5</p> <p>defined [6] - 2129:1, 2169:14, 2171:20, 2172:10, 2228:10, 2233:4</p> <p>definitely [4] - 2084:22, 2089:15, 2150:23, 2195:2</p> <p>definition [10] - 2099:10, 2099:11, 2099:20, 2105:2, 2118:7, 2128:20, 2140:10, 2140:14, 2176:16, 2228:7</p> <p>definitions [1] - 2140:13</p> <p>deleted [1] - 2088:21</p> <p>delivering [7] - 2091:17, 2112:24, 2147:19, 2187:17, 2188:13, 2188:14, 2236:15</p> <p>delivers [1] - 2181:16</p> <p>Delivery [1] - 2217:17</p> <p>delivery [1] - 2137:3</p> <p>demand [1] - 2195:19</p> <p>demonstrated [5] - 2137:4, 2144:4, 2146:21, 2161:23, 2164:3</p> <p>demonstrating [2] - 2127:17, 2210:14</p> <p>demonstration [4] - 2138:3, 2138:6, 2157:7, 2178:22</p> <p>demonstrative [1] - 2148:20</p> <p>dependent [12] - 2097:9, 2132:19, 2133:7, 2133:9, 2134:4, 2134:13, 2134:14, 2134:22, 2155:21, 2199:14, 2199:15, 2199:16</p> <p>DEPUTY [1] - 2079:25</p> <p>describe [11] - 2158:4, 2164:2, 2184:6, 2194:13, 2201:11, 2210:10, 2211:8, 2212:7, 2215:21, 2217:24, 2220:18</p> <p>described [11] - 2120:1, 2120:9, 2126:16, 2169:18, 2198:22, 2198:23, 2213:1, 2215:20, 2218:17, 2219:1, 2226:20</p> <p>describes [6] - 2143:7, 2143:9, 2158:23, 2170:9, 2226:1, 2227:3</p> <p>describing [7] - 2086:14, 2086:22, 2117:6, 2159:15, 2162:19, 2177:9, 2200:4</p> <p>description [7] - 2119:6, 2145:1, 2165:13, 2165:14, 2181:10, 2214:21, 2224:14</p> <p>descriptions [2] - 2208:20, 2219:1</p> <p>desktop [1] - 2150:12</p> <p>detail [3] - 2112:17, 2131:10, 2205:4</p> <p>detect [1] - 2171:25</p> <p>detecting [5] - 2168:9, 2171:14, 2171:18, 2171:20, 2204:6</p> <p>detects [1] - 2172:3</p> <p>determine [1] - 2135:3</p> <p>determining [1] - 2124:17</p> <p>developed [1] - 2184:8</p>	<p>device [18] - 2094:23, 2107:5, 2111:12, 2123:20, 2129:5, 2139:21, 2140:1, 2140:15, 2141:1, 2155:15, 2172:7, 2173:13, 2181:9, 2181:18, 2205:6, 2210:17, 2212:12, 2215:6</p> <p>device's [1] - 2118:21</p> <p>devices [19] - 2081:13, 2082:10, 2082:24, 2090:22, 2091:2, 2093:21, 2093:24, 2105:13, 2107:23, 2108:4, 2112:5, 2118:17, 2131:13, 2131:21, 2169:16, 2179:13, 2191:4, 2209:23, 2212:14</p> <p>dialing [1] - 2101:18</p> <p>dialup [1] - 2169:4</p> <p>Diane [1] - 2078:3</p> <p>differ [2] - 2097:10, 2193:15</p> <p>difference [18] - 2090:24, 2091:4, 2096:14, 2108:23, 2108:24, 2108:25, 2110:14, 2111:6, 2121:2, 2121:4, 2121:12, 2121:19, 2123:17, 2123:19, 2124:21, 2240:2, 2240:4</p> <p>differences [14] - 2084:1, 2085:19, 2088:8, 2090:17, 2090:18, 2121:2, 2124:5, 2124:6, 2124:10, 2126:3, 2126:7, 2127:4, 2127:12, 2132:4</p> <p>different [48] - 2077:17, 2081:25, 2082:12, 2082:13, 2083:21, 2084:3, 2084:17, 2085:25, 2086:14, 2086:15, 2089:12, 2096:3, 2096:23, 2097:11, 2103:15, 2103:18, 2108:13, 2111:4, 2111:18, 2111:19, 2114:9, 2117:3, 2117:4, 2117:7, 2124:19, 2125:8, 2127:10, 2131:15, 2132:3, 2143:14, 2143:18, 2159:11, 2159:12, 2159:25, 2169:2, 2170:6, 2170:10, 2175:16, 2185:21, 2192:24, 2197:22, 2211:10, 2212:24, 2235:12, 2235:13, 2235:21, 2236:12, 2238:23</p> <p>differently [1] - 2232:10</p> <p>Digeo [8] - 2225:7, 2225:22, 2225:23, 2225:25, 2226:14, 2226:18, 2226:20</p> <p>digital [24] - 2099:17, 2099:22, 2133:24, 2137:3, 2140:15, 2140:22, 2141:2, 2141:6, 2141:7, 2142:15, 2142:21, 2145:20, 2150:6, 2150:15, 2151:12, 2151:22, 2162:16, 2173:9, 2181:17, 2181:19, 2182:3, 2186:16, 2205:3, 2232:22</p> <p>digital-to-analog [1] - 2151:22</p> <p>digital-to-audio [1] - 2150:6</p> <p>digitally [1] - 2140:23</p> <p>digitized [1] - 2142:23</p> <p>direct [1] - 2123:14</p> <p>DIRECT [1] - 2081:1</p> <p>direction [1] - 2211:14</p> <p>directly [2] - 2113:15, 2120:3</p> <p>Disc [1] - 2208:7</p> <p>disclose [3] - 2182:25, 2190:12, 2193:23</p> <p>disclosed [1] - 2185:13</p> <p>discloses [2] - 2191:2, 2200:16</p>	<p>Discman [8] - 2209:17, 2210:1, 2210:12, 2213:10, 2216:25, 2217:2, 2219:17</p> <p>Discmen [2] - 2209:24, 2217:1</p> <p>discontinue [2] - 2166:4, 2202:19</p> <p>discontinuing [8] - 2153:24, 2157:19, 2166:13, 2166:17, 2166:24, 2193:6, 2196:3, 2202:25</p> <p>discrete [1] - 2114:19</p> <p>discuss [6] - 2118:8, 2186:14, 2207:6, 2207:15, 2215:18, 2222:14</p> <p>discussed [18] - 2112:17, 2118:16, 2119:12, 2121:5, 2132:1, 2142:9, 2158:16, 2164:15, 2165:1, 2201:18, 2203:9, 2204:8, 2205:1, 2205:16, 2205:18, 2205:23, 2206:21, 2225:15</p> <p>discussing [2] - 2223:2, 2226:21</p> <p>discussion [15] - 2079:13, 2085:10, 2118:19, 2119:8, 2137:8, 2140:21, 2142:4, 2142:20, 2151:2, 2167:22, 2172:4, 2187:17, 2197:24, 2200:18, 2207:15</p> <p>discussions [1] - 2164:13</p> <p>disk [18] - 2082:10, 2082:23, 2083:1, 2083:16, 2107:21, 2122:14, 2129:6, 2146:1, 2146:3, 2146:6, 2146:7, 2169:5, 2169:17, 2186:24, 2209:24, 2210:13, 2210:15, 2211:2</p> <p>diskette [1] - 2169:13</p> <p>display [13] - 2101:8, 2156:3, 2156:6, 2156:25, 2165:22, 2194:19, 2194:24, 2195:5, 2202:14, 2214:20, 2216:17, 2222:2, 2222:4</p> <p>displayable [3] - 2165:14, 2201:23, 2202:14</p> <p>displayed [1] - 2152:22</p> <p>displaying [2] - 2156:4, 2194:20</p> <p>displays [2] - 2163:6, 2163:13</p> <p>dispute [4] - 2105:12, 2105:14, 2147:7, 2188:6</p> <p>distributing [3] - 2226:10, 2227:4, 2227:9</p> <p>distribution [1] - 2226:3</p> <p>division [1] - 2239:17</p> <p>doctor [2] - 2120:17, 2189:22</p> <p>doctoral [1] - 2078:5</p> <p>doctrine [10] - 2109:5, 2109:22, 2110:4, 2111:2, 2111:16, 2111:17, 2230:20, 2232:1, 2232:14, 2232:21</p> <p>document [7] - 2106:15, 2122:10, 2143:7, 2155:14, 2177:21, 2177:22, 2204:14</p> <p>documents [2] - 2105:21, 2105:23</p> <p>done [7] - 2091:18, 2110:9, 2110:11, 2201:19, 2206:24, 2232:6, 2239:22</p> <p>door [1] - 2123:3</p> <p>dot [1] - 2081:14</p> <p>down [19] - 2080:2, 2083:11, 2084:10, 2085:20, 2086:13, 2094:9, 2095:20, 2096:16, 2100:8, 2134:12, 2161:7,</p>
--	---	---

<p>2169:4, 2177:24, 2200:2, 2221:22, 2229:3, 2229:15, 2230:15, 2232:17 download [10] - 2097:20, 2097:21, 2097:22, 2097:23, 2099:2, 2119:25, 2121:6, 2145:4, 2145:5, 2184:4 downloaded [7] - 2143:6, 2144:15, 2144:21, 2144:23, 2162:17, 2184:1, 2200:2 downloading [32] - 2098:12, 2099:4, 2099:10, 2099:17, 2100:20, 2105:2, 2110:21, 2121:15, 2141:15, 2141:17, 2141:25, 2143:19, 2144:17, 2144:20, 2145:8, 2182:20, 2183:2, 2183:4, 2183:8, 2183:14, 2183:25, 2184:4, 2184:15, 2185:4, 2200:15, 2200:16, 2204:9, 2204:12, 2208:25, 2209:3, 2209:5, 2232:22 downloads [1] - 2144:7 Dr [139] - 2079:21, 2080:3, 2080:12, 2081:3, 2083:8, 2083:22, 2085:4, 2089:11, 2095:23, 2096:4, 2097:1, 2097:16, 2100:3, 2100:7, 2100:13, 2101:20, 2103:15, 2104:15, 2104:20, 2106:13, 2109:23, 2110:7, 2110:17, 2113:2, 2115:1, 2115:10, 2118:4, 2118:9, 2118:24, 2120:2, 2120:12, 2120:23, 2121:3, 2121:13, 2122:7, 2123:18, 2124:6, 2124:23, 2125:2, 2125:9, 2126:13, 2126:20, 2128:15, 2129:8, 2129:11, 2130:12, 2131:1, 2131:6, 2131:14, 2131:16, 2132:12, 2135:13, 2136:2, 2136:13, 2137:11, 2138:1, 2138:5, 2138:11, 2139:15, 2140:17, 2141:11, 2145:13, 2145:19, 2146:11, 2148:19, 2149:6, 2149:25, 2151:23, 2153:22, 2155:3, 2155:17, 2156:2, 2157:12, 2162:1, 2163:19, 2165:17, 2167:6, 2168:16, 2169:20, 2170:18, 2172:12, 2172:16, 2172:20, 2173:3, 2174:6, 2174:15, 2175:2, 2175:12, 2176:6, 2177:19, 2178:6, 2178:10, 2180:18, 2182:1, 2182:10, 2184:6, 2185:12, 2189:25, 2190:24, 2193:19, 2195:12, 2196:15, 2198:8, 2199:4, 2199:18, 2200:15, 2200:22, 2201:12, 2203:10, 2205:12, 2206:1, 2206:14, 2206:25, 2207:2, 2207:13, 2207:25, 2210:6, 2210:9, 2211:8, 2213:8, 2214:8, 2214:11, 2215:15, 2217:8, 2217:15, 2217:24, 2219:10, 2219:19, 2221:9, 2222:18, 2226:17, 2226:22, 2229:18, 2229:25, 2233:8, 2233:22, 2235:6, 2241:9 dragging [1] - 2167:20 dreadfully [1] - 2100:23 drive [18] - 2081:13, 2081:21, 2083:11, 2088:12, 2107:21, 2108:3, 2108:8, 2108:9, 2131:7, 2144:6, 2146:2, 2146:3, 2146:6, 2146:9, 2186:20, 2240:23 drives [4] - 2131:9, 2131:10, 2144:14, 2146:1</p>	<p>Dulcimer [15] - 2081:12, 2081:19, 2081:21, 2082:11, 2082:19, 2083:2, 2083:12, 2084:4, 2088:11, 2088:18, 2088:22, 2088:24, 2089:3, 2122:9, 2122:10 during [5] - 2078:23, 2088:14, 2122:8, 2214:13, 2230:2 dynamic [1] - 2150:17</p> <p style="text-align: center;">E</p> <p>E-Data [6] - 2225:7, 2225:12, 2225:18, 2226:6, 2226:8 earphones [1] - 2187:20 easier [4] - 2078:12, 2092:12, 2127:15, 2227:12 easily [1] - 2123:7 echo [1] - 2240:20 education [3] - 2176:10, 2176:14, 2192:3 effect [2] - 2090:6, 2134:21 efficient [1] - 2083:7 efficiently [1] - 2128:5 either [6] - 2078:19, 2109:4, 2129:4, 2137:18, 2164:4, 2196:9 Elacqua [4] - 2078:15, 2080:22, 2085:9, 2180:14 ELACQUA [101] - 2079:22, 2080:23, 2081:2, 2084:25, 2085:3, 2085:6, 2085:11, 2085:15, 2085:18, 2086:7, 2086:12, 2087:3, 2087:13, 2088:2, 2088:6, 2091:25, 2092:3, 2092:16, 2093:3, 2093:10, 2093:16, 2094:11, 2094:13, 2095:14, 2095:22, 2099:6, 2099:8, 2100:7, 2100:12, 2104:15, 2104:19, 2106:9, 2106:11, 2109:10, 2109:13, 2109:16, 2109:20, 2109:21, 2122:3, 2122:6, 2124:24, 2125:1, 2130:9, 2130:10, 2130:24, 2131:5, 2132:9, 2132:11, 2135:17, 2135:20, 2135:24, 2136:1, 2139:1, 2139:3, 2142:17, 2143:2, 2148:16, 2148:18, 2149:3, 2149:5, 2149:23, 2149:24, 2176:19, 2176:23, 2177:6, 2177:8, 2177:14, 2177:16, 2177:24, 2178:1, 2178:7, 2178:9, 2180:6, 2180:15, 2180:17, 2197:20, 2197:23, 2198:2, 2198:6, 2198:7, 2207:8, 2207:11, 2207:12, 2210:5, 2210:8, 2213:19, 2213:23, 2214:1, 2214:7, 2214:10, 2217:12, 2217:14, 2217:20, 2217:23, 2218:9, 2218:11, 2223:16, 2223:23, 2224:16, 2224:18, 2227:10 Electronic [1] - 2226:1 electronic [1] - 2233:5 element [24] - 2090:8, 2090:9, 2090:10, 2128:19, 2140:7, 2147:5, 2155:13, 2156:15, 2166:17, 2167:9, 2168:23, 2169:23, 2175:6, 2175:9, 2179:20, 2186:6, 2187:9, 2198:16, 2201:22,</p>	<p>2202:25, 2203:22 elements [12] - 2086:16, 2158:5, 2164:13, 2170:15, 2172:11, 2190:8, 2193:23, 2201:17, 2206:5, 2206:6, 2235:22 email [1] - 2127:8 embodiment [2] - 2234:23 emphasized [1] - 2082:21 employees [1] - 2085:5 employing [1] - 2156:17 enabling [1] - 2163:14 ENCO [1] - 2223:24 end [10] - 2092:9, 2094:3, 2199:3, 2216:22, 2216:23, 2222:10, 2236:19, 2236:21, 2239:1, 2239:5 endless [1] - 2232:6 engage [1] - 2239:16 entered [1] - 2208:17 enters [2] - 2080:19, 2130:7 entire [7] - 2115:21, 2115:25, 2116:2, 2132:25, 2171:5, 2189:1, 2239:3 entitled [1] - 2217:16 entries [3] - 2093:23, 2159:4, 2159:11 entry [6] - 2152:20, 2153:12, 2154:19, 2158:17, 2159:5, 2159:11 enumeration [1] - 2235:18 equivalent [23] - 2089:19, 2097:4, 2097:6, 2107:18, 2111:12, 2112:4, 2115:21, 2116:2, 2116:4, 2118:22, 2120:15, 2120:18, 2120:19, 2124:18, 2125:5, 2125:7, 2125:22, 2126:24, 2129:12, 2131:25, 2132:2, 2132:5, 2237:4 equivalents [28] - 2089:17, 2089:18, 2089:24, 2090:16, 2096:10, 2096:13, 2109:5, 2109:9, 2109:23, 2110:4, 2111:3, 2111:7, 2111:10, 2111:14, 2111:15, 2111:16, 2111:17, 2112:2, 2131:24, 2230:21, 2232:1, 2232:14, 2232:21, 2233:10, 2235:8, 2237:11, 2237:12 era [1] - 2137:10 error [1] - 2231:14 especially [4] - 2123:1, 2228:15, 2231:5, 2231:9 essence [1] - 2084:6 essentially [1] - 2103:22 establish [1] - 2148:15 established [1] - 2078:13 establishes [1] - 2085:21 establishing [5] - 2119:4, 2141:14, 2168:22, 2168:24, 2205:7 et [5] - 2126:19, 2135:2, 2169:4, 2202:25, 2220:23 Ethernet [2] - 2142:10, 2142:12 evaluate [1] - 2149:15 evaluation [1] - 2149:16 event [1] - 2230:3 everywhere [1] - 2087:23 evidence [10] - 2127:11, 2149:12,</p>
--	--	---

<p>2150:8, 2206:23, 2231:5, 2231:17, 2232:21, 2233:10, 2234:5, 2237:3</p> <p>evidentiary [1] - 2078:8</p> <p>exact [4] - 2134:6, 2172:5, 2184:1, 2207:6</p> <p>exactly [13] - 2110:13, 2110:25, 2116:25, 2156:5, 2179:12, 2184:7, 2190:23, 2191:5, 2192:13, 2193:14, 2211:11, 2211:20, 2229:9</p> <p>EXAMINATION [1] - 2081:1</p> <p>examiner [2] - 2137:17, 2137:21</p> <p>example [25] - 2082:14, 2086:3, 2089:25, 2102:24, 2107:9, 2108:2, 2108:8, 2108:18, 2110:8, 2110:21, 2117:10, 2117:12, 2150:7, 2158:15, 2159:9, 2159:10, 2164:14, 2189:20, 2201:19, 2215:10, 2216:25, 2220:3, 2220:10, 2224:11, 2236:2</p> <p>examples [1] - 2212:15</p> <p>except [1] - 2135:20</p> <p>excuse [8] - 2086:25, 2090:1, 2103:17, 2115:16, 2140:3, 2141:13, 2173:25, 2221:25</p> <p>excused [1] - 2229:13</p> <p>executing [2] - 2166:2, 2202:18</p> <p>exercise [1] - 2231:12</p> <p>Exhibit [76] - 2075:1, 2075:2, 2075:3, 2075:4, 2075:5, 2075:6, 2075:7, 2075:8, 2075:9, 2075:10, 2075:11, 2075:12, 2075:13, 2075:14, 2075:15, 2075:16, 2075:17, 2075:18, 2075:19, 2075:20, 2075:21, 2075:22, 2075:23, 2075:24, 2075:25, 2078:16, 2079:5, 2079:12, 2079:17, 2085:1, 2093:15, 2099:7, 2106:10, 2119:12, 2122:4, 2124:25, 2128:8, 2128:12, 2140:20, 2141:10, 2142:18, 2146:24, 2147:21, 2151:5, 2153:4, 2154:12, 2156:7, 2161:7, 2163:5, 2176:20, 2176:21, 2181:10, 2182:14, 2182:24, 2187:2, 2187:21, 2194:16, 2195:8, 2209:15, 2210:10, 2211:18, 2211:23, 2212:5, 2212:19, 2213:2, 2213:9, 2213:16, 2214:7, 2215:17, 2215:21, 2216:15, 2217:3, 2217:13, 2219:11, 2223:16</p> <p>exhibit [10] - 2085:8, 2087:8, 2122:4, 2128:7, 2128:10, 2180:8, 2212:2, 2213:8, 2214:4, 2215:14</p> <p>Exhibits [3] - 2079:1, 2079:9</p> <p>exhibits [2] - 2085:1, 2087:10</p> <p>existed [1] - 2177:3</p> <p>existence [1] - 2224:25</p> <p>existing [1] - 2220:15</p> <p>exit [3] - 2191:13, 2191:15</p> <p>exits [3] - 2129:21, 2180:1, 2229:14</p> <p>experience [5] - 2176:11, 2192:3, 2192:6, 2221:16, 2228:2</p> <p>expert [7] - 2130:3, 2148:14, 2148:22, 2149:14, 2206:21, 2229:18, 2241:10</p> <p>experts [4] - 2149:13, 2149:18, 2228:1, 2228:8</p>	<p>explain [34] - 2081:9, 2091:6, 2092:5, 2093:18, 2097:17, 2098:15, 2099:10, 2100:8, 2100:18, 2101:23, 2104:22, 2105:16, 2107:1, 2111:23, 2116:8, 2122:23, 2124:12, 2132:17, 2136:4, 2136:13, 2139:15, 2139:24, 2141:24, 2143:23, 2149:13, 2150:1, 2164:7, 2167:16, 2170:4, 2175:14, 2180:21, 2182:4, 2185:18, 2189:7</p> <p>explanation [1] - 2104:20</p> <p>explicitly [2] - 2169:17, 2239:2</p> <p>expressed [1] - 2231:4</p> <p>external [1] - 2113:12</p> <p style="text-align: center;">F</p> <p>F.2d [1] - 2078:7</p> <p>F.3d [1] - 2239:10</p> <p>facilitating [1] - 2119:16</p> <p>fact [16] - 2082:21, 2098:11, 2105:21, 2117:8, 2120:19, 2124:16, 2142:7, 2183:25, 2189:10, 2197:3, 2208:20, 2212:15, 2214:22, 2215:10, 2237:15, 2237:24</p> <p>factor [3] - 2121:11, 2122:19, 2238:12</p> <p>factors [1] - 2238:1</p> <p>facts [1] - 2149:12</p> <p>Fadell [2] - 2124:14, 2131:9</p> <p>Fadell's [2] - 2122:8, 2122:9</p> <p>failure [1] - 2144:16</p> <p>familiar [4] - 2101:5, 2238:12, 2238:23</p> <p>fancy [1] - 2106:17</p> <p>far [9] - 2108:14, 2119:13, 2121:23, 2127:5, 2136:14, 2138:11, 2175:3, 2208:8, 2224:10</p> <p>fast [4] - 2083:4, 2086:24, 2093:24, 2121:7</p> <p>fast-forward [1] - 2086:24</p> <p>faster [2] - 2127:21, 2128:3</p> <p>fear [1] - 2106:7</p> <p>feature [2] - 2091:14, 2144:5</p> <p>features [3] - 2082:24, 2216:18, 2216:19</p> <p>Federal [2] - 2077:11, 2077:15</p> <p>feedback [1] - 2219:2</p> <p>felt [1] - 2227:8</p> <p>few [6] - 2077:22, 2115:3, 2141:10, 2166:7, 2170:19, 2227:15</p> <p>field [1] - 2165:16</p> <p>fifth [7] - 2088:9, 2088:15, 2089:8, 2090:1, 2090:8, 2091:16, 2112:23</p> <p>Figure [17] - 2092:4, 2092:8, 2092:13, 2092:14, 2092:17, 2093:4, 2096:14, 2100:4, 2100:6, 2100:8, 2100:13, 2104:21, 2181:11, 2182:14, 2187:2, 2195:8, 2234:21</p> <p>figure [2] - 2187:2, 2234:23</p> <p>figures [2] - 2100:16, 2103:7</p> <p>file [54] - 2091:22, 2092:9, 2099:18, 2099:23, 2119:4, 2121:15, 2141:20,</p>	<p>2143:3, 2143:5, 2143:10, 2144:18, 2144:20, 2144:21, 2153:25, 2156:16, 2157:2, 2157:20, 2157:22, 2158:9, 2159:3, 2159:20, 2160:23, 2165:1, 2166:14, 2166:19, 2166:25, 2167:1, 2168:22, 2168:24, 2182:9, 2182:11, 2184:2, 2184:9, 2184:12, 2184:13, 2184:16, 2185:6, 2185:9, 2191:16, 2193:8, 2196:25, 2197:3, 2199:23, 2202:20, 2202:22, 2205:7, 2214:23, 2231:16, 2232:24, 2234:16, 2236:19, 2236:21</p> <p>filed [2] - 2138:12, 2214:14</p> <p>files [29] - 2087:23, 2099:18, 2099:22, 2123:23, 2142:15, 2142:21, 2143:15, 2143:17, 2144:5, 2161:5, 2162:17, 2164:22, 2165:4, 2169:12, 2183:25, 2184:1, 2184:4, 2186:23, 2187:11, 2188:15, 2188:16, 2200:9, 2200:10, 2201:22, 2202:19, 2209:5, 2232:23, 2236:15</p> <p>filing [8] - 2138:14, 2138:18, 2138:20, 2139:7, 2178:16, 2195:1, 2209:9, 2232:7</p> <p>fill [2] - 2201:3, 2231:11</p> <p>filter [1] - 2218:25</p> <p>finally [5] - 2165:6, 2168:12, 2173:18, 2229:2, 2229:6</p> <p>financial [1] - 2225:9</p> <p>fine [3] - 2135:16, 2167:14, 2199:12</p> <p>finger [3] - 2127:16, 2127:19, 2128:2</p> <p>finish [2] - 2153:12, 2224:17</p> <p>finished [2] - 2136:15, 2202:4</p> <p>FireWire [12] - 2105:9, 2121:6, 2121:16, 2122:16, 2123:20, 2123:22, 2124:14, 2124:15, 2124:17, 2124:18, 2124:19, 2125:7</p> <p>first [47] - 2079:15, 2089:23, 2090:8, 2092:23, 2098:1, 2100:16, 2100:22, 2110:22, 2112:11, 2112:12, 2115:24, 2116:5, 2121:2, 2121:4, 2126:14, 2128:18, 2129:14, 2136:7, 2137:2, 2139:17, 2140:8, 2142:4, 2144:3, 2145:15, 2147:18, 2150:9, 2151:7, 2156:1, 2164:7, 2168:2, 2168:9, 2173:11, 2173:23, 2178:4, 2179:15, 2181:3, 2183:11, 2188:12, 2201:21, 2201:22, 2203:22, 2217:18, 2221:12, 2225:3, 2225:12, 2236:23</p> <p>five [3] - 2093:23, 2232:3, 2232:11</p> <p>fixed [1] - 2096:15</p> <p>flagship [1] - 2218:1</p> <p>flash [7] - 2129:9, 2129:12, 2130:14, 2130:17, 2130:22, 2131:7, 2131:12</p> <p>floppy [5] - 2108:3, 2108:8, 2108:9, 2169:12, 2169:17</p> <p>fly [1] - 2076:15</p> <p>focus [5] - 2077:20, 2085:19, 2118:18, 2196:23, 2230:9</p> <p>focused [1] - 2138:23</p> <p>focusing [2] - 2078:16, 2230:11</p>
--	---	---

<p>folks ^[1] - 2136:11</p> <p>follow ^[1] - 2108:4</p> <p>followed ^[2] - 2169:2, 2233:16</p> <p>following ^[1] - 2109:18</p> <p>follows ^[4] - 2157:22, 2168:13, 2191:3, 2236:5</p> <p>for.. ^[1] - 2215:5</p> <p>FOREGOING ^[1] - 2241:20</p> <p>forever ^[1] - 2095:10</p> <p>forgot ^[2] - 2103:17, 2215:18</p> <p>form ^[10] - 2081:23, 2082:3, 2088:24, 2105:25, 2109:8, 2145:25, 2146:6, 2147:8, 2182:11</p> <p>format ^[1] - 2197:1</p> <p>formats ^[2] - 2117:12, 2142:24</p> <p>formed ^[1] - 2182:13</p> <p>formula ^[1] - 2228:11</p> <p>forth ^[5] - 2133:12, 2133:25, 2160:8, 2162:11, 2235:5</p> <p>forward ^[35] - 2078:10, 2086:17, 2086:24, 2090:20, 2154:21, 2157:15, 2157:17, 2158:9, 2158:19, 2159:7, 2159:13, 2161:20, 2166:16, 2168:10, 2174:2, 2192:12, 2192:25, 2195:15, 2195:16, 2196:9, 2197:13, 2198:12, 2203:1, 2204:7, 2205:16, 2209:7, 2209:14, 2211:1, 2211:5, 2212:9, 2234:16, 2235:2, 2236:3</p> <p>forwards ^[4] - 2159:17, 2197:11, 2211:24, 2216:1</p> <p>foundation ^[2] - 2078:18, 2239:4</p> <p>four ^[12] - 2076:13, 2076:18, 2077:9, 2077:24, 2112:6, 2112:8, 2131:15, 2230:8, 2230:14, 2232:2, 2232:11, 2238:4</p> <p>fourth ^[7] - 2090:1, 2112:19, 2112:21, 2147:5, 2187:25, 2237:14</p> <p>frame ^[3] - 2150:13, 2207:24, 2208:1</p> <p>FRIDAY ^[1] - 2076:2</p> <p>FROM ^[1] - 2241:20</p> <p>front ^[10] - 2107:6, 2123:5, 2123:10, 2125:24, 2146:5, 2147:9, 2213:12, 2215:17, 2223:6, 2223:14</p> <p>FTP ^[8] - 2184:2, 2184:3, 2184:5, 2184:7, 2184:8, 2185:4, 2185:8, 2200:21</p> <p>full ^[2] - 2114:6, 2178:4</p> <p>full-size ^[1] - 2114:6</p> <p>fully ^[1] - 2122:15</p> <p>function ^[19] - 2086:3, 2111:9, 2111:13, 2118:13, 2118:14, 2128:25, 2129:1, 2147:18, 2147:19, 2158:6, 2160:20, 2168:23, 2169:10, 2171:20, 2233:10, 2237:8, 2237:9, 2237:10</p> <p>function-way-result ^[1] - 2233:10</p> <p>functionality ^[6] - 2114:25, 2161:23, 2213:1, 2215:19, 2215:22, 2236:13</p> <p>functions ^[3] - 2140:25, 2197:12, 2222:8</p> <p>futility ^[1] - 2231:12</p>	<p style="text-align: center;">G</p> <p>games ^[1] - 2117:11</p> <p>garage ^[5] - 2119:23, 2120:8, 2120:9, 2120:21, 2123:3</p> <p>Gen ^[3] - 2084:4, 2086:20, 2088:25</p> <p>Gene ^[1] - 2137:4</p> <p>general ^[10] - 2150:4, 2150:9, 2160:20, 2171:22, 2189:3, 2189:9, 2189:11, 2207:19, 2232:1, 2234:7</p> <p>generally ^[2] - 2207:22, 2219:24</p> <p>generation ^[3] - 2088:9, 2088:15, 2089:8</p> <p>Generation ^[5] - 2082:4, 2082:9, 2085:16, 2086:9, 2088:22</p> <p>generations ^[2] - 2084:18, 2085:20</p> <p>gentlemen ^[10] - 2080:21, 2080:24, 2087:16, 2129:19, 2149:10, 2179:24, 2227:16, 2227:21, 2228:1, 2228:3</p> <p>Georgia ^[1] - 2238:9</p> <p>Georgia-Pacific ^[1] - 2238:9</p> <p>Geraci ^[2] - 2078:3, 2078:19</p> <p>germane ^[2] - 2085:9, 2087:12</p> <p>gigabytes ^[2] - 2122:12, 2131:11</p> <p>given ^[7] - 2121:15, 2159:4, 2176:13, 2183:12, 2192:6, 2232:4</p> <p>glasses ^[3] - 2094:4, 2133:11, 2213:15</p> <p>grab ^[1] - 2184:13</p> <p>graph ^[3] - 2134:12, 2134:23, 2164:6</p> <p>graphic ^[1] - 2172:6</p> <p>great ^[1] - 2214:15</p> <p>group ^[2] - 2163:7, 2176:9</p> <p>groupings ^[1] - 2097:11</p> <p>grumbling ^[1] - 2077:19</p> <p>guaranteed ^[1] - 2106:3</p> <p>guess ^[3] - 2076:15, 2095:14, 2241:8</p> <p>guide ^[5] - 2176:25, 2177:7, 2177:9, 2177:10, 2194:1</p> <p style="text-align: center;">H</p> <p>half ^[4] - 2081:8, 2114:1, 2153:20, 2241:11</p> <p>Hall ^[1] - 2078:7</p> <p>hand ^[9] - 2113:3, 2125:17, 2131:18, 2131:19, 2136:14, 2138:2, 2156:8, 2161:13, 2177:17</p> <p>handful ^[1] - 2219:16</p> <p>handheld ^[2] - 2209:11, 2209:23</p> <p>handing ^[1] - 2210:9</p> <p>handle ^[1] - 2087:21</p> <p>handled ^[1] - 2231:23</p> <p>handler ^[1] - 2085:22</p> <p>handlers ^[1] - 2082:12</p> <p>hard ^[25] - 2081:12, 2081:20, 2083:11, 2083:16, 2088:12, 2094:6, 2108:3, 2116:17, 2122:14, 2131:7, 2131:9, 2131:10, 2144:6, 2144:14, 2146:7, 2146:9, 2149:19, 2186:20, 2186:23,</p>	<p>2210:20, 2210:23, 2213:15, 2213:19, 2227:25, 2240:17</p> <p>head ^[1] - 2192:5</p> <p>headphone ^[1] - 2113:10</p> <p>headphones ^[3] - 2146:19, 2146:20, 2187:19</p> <p>headset ^[2] - 2187:10, 2187:11</p> <p>hear ^[6] - 2146:22, 2187:12, 2200:13, 2214:6, 2219:7, 2219:8</p> <p>heard ^[10] - 2090:25, 2106:23, 2107:2, 2136:7, 2139:2, 2141:7, 2190:13, 2226:23, 2229:3, 2233:11</p> <p>hearing ^[1] - 2179:8</p> <p>hearsay ^[2] - 2079:10, 2079:11</p> <p>held ^[1] - 2142:8</p> <p>help ^[3] - 2148:20, 2148:25, 2234:2</p> <p>helpful ^[5] - 2076:21, 2101:1, 2233:24, 2234:14, 2240:11</p> <p>HEREBY ^[1] - 2241:19</p> <p>hide ^[1] - 2087:22</p> <p>high ^[6] - 2123:13, 2129:5, 2129:12, 2140:21, 2140:24, 2169:3</p> <p>high-quality ^[1] - 2140:24</p> <p>high-speed ^[4] - 2123:13, 2129:5, 2129:12, 2169:3</p> <p>higher ^[5] - 2161:17, 2231:3, 2231:15, 2231:19, 2232:9</p> <p>highest ^[1] - 2181:17</p> <p>highlight ^[6] - 2152:23, 2154:15, 2161:12, 2161:18, 2161:21, 2177:7</p> <p>highlighted ^[7] - 2099:25, 2151:18, 2158:11, 2161:15, 2183:19, 2195:9, 2218:14</p> <p>highlighting ^[2] - 2211:18, 2211:22</p> <p>highway ^[3] - 2113:17, 2113:20, 2114:13</p> <p>hint ^[1] - 2080:9</p> <p>history ^[1] - 2214:23</p> <p>hit ^[7] - 2091:10, 2093:2, 2154:25, 2161:18, 2161:21, 2235:2, 2235:3</p> <p>hitting ^[1] - 2154:19</p> <p>hold ^[3] - 2139:23, 2149:9, 2227:21</p> <p>holding ^[4] - 2120:24, 2128:6, 2214:8, 2235:13</p> <p>HOLDREITH ^[16] - 2080:11, 2085:7, 2087:5, 2087:7, 2087:11, 2109:8, 2109:11, 2109:14, 2109:17, 2148:8, 2207:1, 2214:3, 2227:14, 2227:19, 2227:24, 2240:10</p> <p>home ^[4] - 2101:11, 2102:24, 2119:20, 2127:8</p> <p>HON ^[1] - 2076:3</p> <p>Honor ^[56] - 2076:15, 2077:10, 2077:25, 2079:22, 2080:7, 2080:11, 2080:18, 2080:23, 2085:7, 2085:12, 2087:3, 2088:2, 2100:7, 2100:11, 2104:15, 2130:5, 2130:9, 2130:24, 2131:2, 2135:17, 2135:22, 2139:2, 2148:8, 2148:16, 2149:1, 2149:23, 2180:7, 2180:15, 2197:23, 2198:6,</p>
--	---	--

<p>2206:15, 2207:1, 2207:11, 2210:5, 2214:3, 2214:8, 2227:10, 2227:20, 2229:16, 2229:20, 2229:24, 2230:13, 2230:16, 2232:12, 2233:20, 2234:4, 2234:14, 2235:24, 2236:11, 2237:2, 2237:15, 2238:4, 2238:15, 2239:10, 2240:17, 2241:8</p> <p>hook [5] - 2089:2, 2107:6, 2107:7, 2123:22</p> <p>hope [1] - 2211:12</p> <p>hopeful [1] - 2241:7</p> <p>hopefully [1] - 2240:7</p> <p>hoping [1] - 2232:15</p> <p>host [7] - 2104:25, 2105:7, 2106:18, 2106:21, 2110:11, 2110:12</p> <p>Host [1] - 2106:19</p> <p>hour [1] - 2241:10</p> <p>hour-and-45-minute [1] - 2230:13</p> <p>hours [6] - 2082:25, 2122:18, 2123:25, 2132:21, 2241:11</p> <p>huge [2] - 2102:12, 2102:18</p> <p>HughesNet [1] - 2102:8</p> <p>hundred [2] - 2121:11, 2122:19</p> <p>hundreds [1] - 2218:2</p> <p>hundredth [1] - 2121:16</p> <p>hurt [1] - 2235:20</p>	<p>incorporated [1] - 2219:8</p> <p>incorporating [3] - 2218:19, 2220:14, 2222:15</p> <p>incorporation [1] - 2192:7</p> <p>incorrect [1] - 2232:9</p> <p>increment [1] - 2153:13</p> <p>incrementing [1] - 2190:21</p> <p>increments [1] - 2153:2</p> <p>indeed [2] - 2139:18, 2142:25</p> <p>independent [9] - 2132:15, 2132:17, 2132:18, 2132:22, 2133:4, 2133:7, 2134:4, 2134:22, 2173:8</p> <p>indicating [44] - 2081:19, 2094:6, 2108:2, 2113:11, 2113:13, 2113:14, 2114:2, 2114:5, 2114:10, 2114:15, 2114:20, 2115:25, 2116:18, 2120:24, 2138:17, 2138:23, 2139:9, 2139:11, 2139:12, 2152:19, 2153:13, 2161:8, 2161:17, 2162:21, 2162:23, 2192:22, 2194:17, 2197:6, 2197:9, 2209:18, 2209:21, 2210:22, 2210:25, 2211:3, 2211:5, 2211:12, 2211:19, 2211:23, 2216:2, 2216:3, 2217:6, 2220:22, 2221:1, 2221:5</p> <p>indicating [27] - 2081:16, 2092:19, 2092:22, 2098:12, 2100:16, 2103:13, 2114:3, 2116:14, 2128:23, 2151:18, 2153:15, 2154:17, 2156:5, 2157:4, 2164:24, 2165:15, 2171:24, 2194:22, 2196:23, 2208:8, 2209:16, 2210:23, 2211:1, 2211:13, 2211:21, 2211:25, 2218:15</p> <p>indication [6] - 2107:16, 2157:1, 2157:4, 2191:11, 2191:19, 2195:5</p> <p>indications [1] - 2228:23</p> <p>indicative [2] - 2168:9, 2171:19</p> <p>individual [2] - 2101:4, 2186:23</p> <p>individually [1] - 2170:16</p> <p>indulgence [1] - 2230:17</p> <p>industry [1] - 2192:4</p> <p>influence [1] - 2133:7</p> <p>information [10] - 2113:17, 2113:20, 2114:13, 2142:24, 2165:15, 2215:13, 2218:25, 2224:12, 2226:11, 2227:7</p> <p>Information [4] - 2217:17, 2226:2, 2226:3, 2226:9</p> <p>infrared [16] - 2118:18, 2118:20, 2118:22, 2118:25, 2119:2, 2119:9, 2119:15, 2119:19, 2120:7, 2123:1, 2123:2, 2123:7, 2123:13, 2123:15, 2123:25, 2124:1</p> <p>infrared's [1] - 2119:12</p> <p>infringe [2] - 2136:9, 2136:18</p> <p>infringed [30] - 2090:4, 2090:11, 2090:13, 2097:8, 2110:19, 2110:20, 2111:1, 2132:25, 2133:2, 2133:15, 2133:16, 2133:19, 2133:20, 2134:1, 2134:2, 2134:8, 2134:11, 2134:18, 2134:19, 2134:20, 2135:3, 2135:8, 2135:11, 2135:12, 2190:7</p> <p>infringement [2] - 2139:20, 2179:10</p>	<p>infringer [1] - 2239:9</p> <p>initial [1] - 2124:15</p> <p>initiate [5] - 2100:2, 2105:5, 2107:14, 2108:7, 2233:1</p> <p>initiates [1] - 2106:19</p> <p>injuring [1] - 2210:13</p> <p>innumerable [1] - 2076:11</p> <p>input [6] - 2125:15, 2147:24, 2153:6, 2165:7, 2173:15, 2205:9</p> <p>inputs [1] - 2172:3</p> <p>inside [1] - 2101:8</p> <p>instead [12] - 2109:1, 2121:17, 2157:15, 2157:21, 2160:12, 2166:6, 2166:14, 2173:24, 2173:25, 2193:8, 2196:4, 2202:20</p> <p>institute [1] - 2079:14</p> <p>instructions [4] - 2206:23, 2228:13, 2228:16, 2229:6</p> <p>insulted [1] - 2232:8</p> <p>integrated [1] - 2115:18</p> <p>intended [2] - 2077:3, 2177:11</p> <p>intending [1] - 2180:4</p> <p>interaction [1] - 2091:1</p> <p>interchangeable [1] - 2116:25</p> <p>interesting [1] - 2240:3</p> <p>interface [1] - 2172:6</p> <p>interfered [1] - 2123:8</p> <p>internal [1] - 2113:13</p> <p>Internet [25] - 2101:19, 2101:22, 2102:7, 2102:9, 2102:10, 2102:11, 2102:14, 2102:18, 2102:23, 2103:5, 2103:6, 2103:22, 2104:7, 2104:10, 2105:20, 2119:18, 2119:25, 2120:4, 2120:9, 2184:9, 2184:12, 2209:3, 2209:6, 2227:5, 2227:9</p> <p>interrogate [1] - 2108:19</p> <p>interrogatories [1] - 2087:16</p> <p>interrogatory [1] - 2087:1</p> <p>intricate [1] - 2091:1</p> <p>invalid [1] - 2136:10</p> <p>invalidity [5] - 2136:2, 2179:11, 2185:22, 2229:23, 2229:25</p> <p>invention [1] - 2220:16</p> <p>invoked [1] - 2086:23</p> <p>involve [1] - 2160:18</p> <p>involved [2] - 2106:6, 2228:20</p> <p>involves [3] - 2083:21, 2091:8, 2196:2</p> <p>iPod [24] - 2082:6, 2082:18, 2085:16, 2086:8, 2086:19, 2088:21, 2088:25, 2089:1, 2089:2, 2089:5, 2094:2, 2094:8, 2094:20, 2107:7, 2107:9, 2107:17, 2108:1, 2110:13, 2122:11, 2122:12, 2128:6, 2128:11, 2130:25</p> <p>iPods [9] - 2083:15, 2105:9, 2105:12, 2109:4, 2115:10, 2124:15, 2125:24, 2131:13, 2136:19</p> <p>IrDA [13] - 2118:20, 2119:9, 2121:9, 2121:17, 2121:18, 2122:18, 2122:22, 2124:18, 2124:22, 2125:5, 2125:6</p> <p>IS [1] - 2241:20</p>
I		
<p>idea [6] - 2076:18, 2079:4, 2100:20, 2191:18, 2208:23, 2209:10</p> <p>ideas [2] - 2136:11, 2164:9</p> <p>identical [4] - 2097:5, 2131:22, 2169:9, 2169:10</p> <p>identically [2] - 2096:9, 2096:11</p> <p>identified [2] - 2131:21, 2234:24</p> <p>identifier [2] - 2152:11, 2161:7</p> <p>identify [2] - 2076:13, 2076:23</p> <p>illustrating [2] - 2101:2, 2102:22</p> <p>image [1] - 2184:17</p> <p>imagine [3] - 2120:20, 2123:4, 2177:12</p> <p>implement [2] - 2091:13, 2112:19</p> <p>implements [1] - 2218:25</p> <p>import [3] - 2145:1, 2145:2</p> <p>important [5] - 2079:4, 2087:25, 2198:5, 2228:15, 2229:4</p> <p>importantly [1] - 2235:6</p> <p>improper [1] - 2239:2</p> <p>inches [4] - 2114:1, 2114:2, 2115:3, 2115:8</p> <p>include [6] - 2143:1, 2163:24, 2199:8, 2217:2, 2227:6, 2236:17</p> <p>included [4] - 2159:5, 2169:11, 2215:4, 2237:16</p> <p>includes [2] - 2188:9, 2193:12</p> <p>including [5] - 2160:22, 2165:13, 2187:9, 2191:14, 2196:21</p> <p>inclusion [1] - 2163:8</p> <p>incompatible [1] - 2106:7</p> <p>incorporate [1] - 2199:2</p>		

<p>ISP ^[1] - 2102:8 issue ^[5] - 2139:4, 2140:2, 2207:19, 2218:4, 2233:23 issued ^[2] - 2137:15, 2139:13 issues ^[4] - 2099:2, 2121:25, 2207:17, 2234:2 itself ^[11] - 2078:17, 2079:5, 2088:21, 2119:6, 2162:5, 2183:1, 2183:6, 2193:22, 2200:19, 2206:7, 2238:9 iTunes ^[10] - 2088:19, 2088:20, 2088:23, 2089:2, 2089:4, 2094:21, 2110:13, 2237:20, 2237:21, 2237:24</p>	<p>key ^[1] - 2082:24 keyboard ^[25] - 2101:7, 2104:6, 2107:6, 2107:17, 2107:21, 2108:3, 2108:10, 2108:17, 2125:18, 2126:12, 2126:15, 2126:17, 2126:21, 2126:25, 2127:5, 2127:7, 2147:9, 2156:20, 2165:9, 2168:7, 2172:3, 2172:8, 2172:10, 2188:3 keyboards ^[2] - 2126:15, 2147:8 killer ^[2] - 2227:22, 2227:25 kind ^[14] - 2088:16, 2090:22, 2094:6, 2108:19, 2111:7, 2113:12, 2114:22, 2135:14, 2150:10, 2152:12, 2177:2, 2191:20, 2197:3, 2241:12 kinds ^[11] - 2096:21, 2103:11, 2127:9, 2165:15, 2170:6, 2184:17, 2185:21, 2209:6, 2212:17, 2227:6, 2234:22 kit ^[3] - 2180:7, 2183:24, 2192:5 Kit ^[9] - 2183:21, 2185:2, 2185:14, 2186:8, 2186:10, 2191:24, 2193:20, 2200:24, 2206:9 knowledge ^[6] - 2078:14, 2078:21, 2078:22, 2079:5, 2193:20, 2198:10 known ^[23] - 2176:3, 2184:23, 2192:2, 2192:4, 2194:25, 2201:2, 2201:3, 2207:21, 2207:23, 2208:5, 2209:2, 2209:9, 2212:16, 2214:22, 2215:3, 2215:9, 2216:25, 2218:20, 2219:5, 2219:24, 2220:1, 2220:5, 2220:6 knows ^[4] - 2105:23, 2220:15, 2228:17</p>	<p>2086:15, 2086:17 layout ^[1] - 2100:19 LCD ^[1] - 2215:3 lead ^[1] - 2148:13 leading ^[1] - 2148:11 learned ^[2] - 2220:24, 2240:20 least ^[16] - 2088:22, 2089:1, 2096:3, 2098:18, 2113:18, 2117:13, 2120:15, 2124:1, 2136:22, 2138:15, 2138:18, 2162:16, 2187:10, 2189:12, 2198:22, 2229:5 left ^[27] - 2094:14, 2099:16, 2104:25, 2107:25, 2113:3, 2125:17, 2126:15, 2126:25, 2130:12, 2131:19, 2136:15, 2136:17, 2136:20, 2137:23, 2138:2, 2144:23, 2156:8, 2163:6, 2177:17, 2180:18, 2196:24, 2208:6, 2211:19, 2212:8, 2212:20, 2217:7, 2229:22 left-hand ^[6] - 2113:3, 2125:17, 2131:19, 2138:2, 2156:8, 2177:17 left-pointing ^[4] - 2196:24, 2211:19, 2212:8, 2212:20 letter ^[1] - 2127:8 letters ^[2] - 2126:13, 2126:14 levels ^[1] - 2124:2 library ^[6] - 2080:6, 2163:7, 2163:10, 2163:14, 2165:4 license ^[3] - 2225:5, 2225:18, 2225:22 licenses ^[2] - 2224:24, 2225:1 lies ^[1] - 2189:9 light ^[1] - 2206:13 likely ^[3] - 2219:7, 2241:2 limine ^[1] - 2079:18 limitation ^[85] - 2091:5, 2091:7, 2091:16, 2109:12, 2110:21, 2110:22, 2111:19, 2112:20, 2112:22, 2112:23, 2115:13, 2117:20, 2118:3, 2118:5, 2118:13, 2120:13, 2120:14, 2124:13, 2125:4, 2125:10, 2125:14, 2125:16, 2128:14, 2128:25, 2132:25, 2139:20, 2139:21, 2140:5, 2140:18, 2141:20, 2143:1, 2144:18, 2145:20, 2145:23, 2146:12, 2146:17, 2147:10, 2147:17, 2154:9, 2155:7, 2157:11, 2159:14, 2159:15, 2162:12, 2166:22, 2168:16, 2169:8, 2170:11, 2174:20, 2174:25, 2175:17, 2179:15, 2180:25, 2181:4, 2181:24, 2182:9, 2185:11, 2185:16, 2186:13, 2186:16, 2186:18, 2186:19, 2187:6, 2187:12, 2187:14, 2187:22, 2187:25, 2188:5, 2188:6, 2189:14, 2190:12, 2193:3, 2193:4, 2194:14, 2195:11, 2195:13, 2195:15, 2203:6, 2205:19, 2206:17, 2230:22, 2234:6, 2234:11, 2234:13 limitations ^[53] - 2090:2, 2096:24, 2097:2, 2097:3, 2097:7, 2110:4, 2110:25, 2125:10, 2132:22, 2132:24, 2134:7, 2134:10, 2145:14, 2145:15, 2153:17, 2158:1, 2162:4, 2163:1, 2163:20, 2166:9, 2167:3, 2168:1,</p>
J		
<p>JMOL ^[4] - 2076:9, 2230:13, 2231:7, 2231:16 JMOLs ^[1] - 2231:6 job ^[1] - 2170:12 journal ^[2] - 2218:1, 2219:15 Judge ^[1] - 2239:1 judge ^[1] - 2240:21 judge's ^[1] - 2128:24 judges ^[1] - 2077:19 judgment ^[1] - 2232:19 jukebox ^[2] - 2208:6, 2208:10 jukeboxes ^[4] - 2208:4, 2208:15, 2208:20, 2208:21 July ^[1] - 2227:19 JULY ^[2] - 2076:2, 2241:19 jump ^[3] - 2154:19, 2161:18, 2210:20 jumping ^[1] - 2154:21 juror ^[1] - 2179:9 jury ^[60] - 2080:19, 2081:9, 2087:24, 2089:21, 2091:6, 2092:5, 2093:18, 2097:18, 2098:15, 2099:11, 2099:14, 2100:18, 2101:23, 2104:22, 2107:1, 2111:24, 2112:20, 2116:8, 2122:23, 2124:12, 2129:21, 2129:25, 2130:7, 2132:18, 2136:5, 2138:2, 2139:15, 2139:24, 2141:24, 2143:23, 2147:13, 2148:21, 2150:1, 2155:12, 2158:4, 2164:7, 2164:19, 2165:19, 2167:16, 2168:19, 2170:4, 2175:15, 2179:16, 2180:1, 2180:12, 2180:21, 2184:6, 2185:18, 2189:7, 2192:19, 2194:13, 2207:7, 2207:15, 2210:10, 2211:8, 2215:21, 2220:18, 2228:18, 2229:14, 2240:15 JURY ^[2] - 2076:2, 2076:4</p>	<p>keyboards ^[2] - 2126:15, 2147:8 killer ^[2] - 2227:22, 2227:25 kind ^[14] - 2088:16, 2090:22, 2094:6, 2108:19, 2111:7, 2113:12, 2114:22, 2135:14, 2150:10, 2152:12, 2177:2, 2191:20, 2197:3, 2241:12 kinds ^[11] - 2096:21, 2103:11, 2127:9, 2165:15, 2170:6, 2184:17, 2185:21, 2209:6, 2212:17, 2227:6, 2234:22 kit ^[3] - 2180:7, 2183:24, 2192:5 Kit ^[9] - 2183:21, 2185:2, 2185:14, 2186:8, 2186:10, 2191:24, 2193:20, 2200:24, 2206:9 knowledge ^[6] - 2078:14, 2078:21, 2078:22, 2079:5, 2193:20, 2198:10 known ^[23] - 2176:3, 2184:23, 2192:2, 2192:4, 2194:25, 2201:2, 2201:3, 2207:21, 2207:23, 2208:5, 2209:2, 2209:9, 2212:16, 2214:22, 2215:3, 2215:9, 2216:25, 2218:20, 2219:5, 2219:24, 2220:1, 2220:5, 2220:6 knows ^[4] - 2105:23, 2220:15, 2228:17</p>	<p>2086:15, 2086:17 layout ^[1] - 2100:19 LCD ^[1] - 2215:3 lead ^[1] - 2148:13 leading ^[1] - 2148:11 learned ^[2] - 2220:24, 2240:20 least ^[16] - 2088:22, 2089:1, 2096:3, 2098:18, 2113:18, 2117:13, 2120:15, 2124:1, 2136:22, 2138:15, 2138:18, 2162:16, 2187:10, 2189:12, 2198:22, 2229:5 left ^[27] - 2094:14, 2099:16, 2104:25, 2107:25, 2113:3, 2125:17, 2126:15, 2126:25, 2130:12, 2131:19, 2136:15, 2136:17, 2136:20, 2137:23, 2138:2, 2144:23, 2156:8, 2163:6, 2177:17, 2180:18, 2196:24, 2208:6, 2211:19, 2212:8, 2212:20, 2217:7, 2229:22 left-hand ^[6] - 2113:3, 2125:17, 2131:19, 2138:2, 2156:8, 2177:17 left-pointing ^[4] - 2196:24, 2211:19, 2212:8, 2212:20 letter ^[1] - 2127:8 letters ^[2] - 2126:13, 2126:14 levels ^[1] - 2124:2 library ^[6] - 2080:6, 2163:7, 2163:10, 2163:14, 2165:4 license ^[3] - 2225:5, 2225:18, 2225:22 licenses ^[2] - 2224:24, 2225:1 lies ^[1] - 2189:9 light ^[1] - 2206:13 likely ^[3] - 2219:7, 2241:2 limine ^[1] - 2079:18 limitation ^[85] - 2091:5, 2091:7, 2091:16, 2109:12, 2110:21, 2110:22, 2111:19, 2112:20, 2112:22, 2112:23, 2115:13, 2117:20, 2118:3, 2118:5, 2118:13, 2120:13, 2120:14, 2124:13, 2125:4, 2125:10, 2125:14, 2125:16, 2128:14, 2128:25, 2132:25, 2139:20, 2139:21, 2140:5, 2140:18, 2141:20, 2143:1, 2144:18, 2145:20, 2145:23, 2146:12, 2146:17, 2147:10, 2147:17, 2154:9, 2155:7, 2157:11, 2159:14, 2159:15, 2162:12, 2166:22, 2168:16, 2169:8, 2170:11, 2174:20, 2174:25, 2175:17, 2179:15, 2180:25, 2181:4, 2181:24, 2182:9, 2185:11, 2185:16, 2186:13, 2186:16, 2186:18, 2186:19, 2187:6, 2187:12, 2187:14, 2187:22, 2187:25, 2188:5, 2188:6, 2189:14, 2190:12, 2193:3, 2193:4, 2194:14, 2195:11, 2195:13, 2195:15, 2203:6, 2205:19, 2206:17, 2230:22, 2234:6, 2234:11, 2234:13 limitations ^[53] - 2090:2, 2096:24, 2097:2, 2097:3, 2097:7, 2110:4, 2110:25, 2125:10, 2132:22, 2132:24, 2134:7, 2134:10, 2145:14, 2145:15, 2153:17, 2158:1, 2162:4, 2163:1, 2163:20, 2166:9, 2167:3, 2168:1,</p>
J		
<p>JMOL ^[4] - 2076:9, 2230:13, 2231:7, 2231:16 JMOLs ^[1] - 2231:6 job ^[1] - 2170:12 journal ^[2] - 2218:1, 2219:15 Judge ^[1] - 2239:1 judge ^[1] - 2240:21 judge's ^[1] - 2128:24 judges ^[1] - 2077:19 judgment ^[1] - 2232:19 jukebox ^[2] - 2208:6, 2208:10 jukeboxes ^[4] - 2208:4, 2208:15, 2208:20, 2208:21 July ^[1] - 2227:19 JULY ^[2] - 2076:2, 2241:19 jump ^[3] - 2154:19, 2161:18, 2210:20 jumping ^[1] - 2154:21 juror ^[1] - 2179:9 jury ^[60] - 2080:19, 2081:9, 2087:24, 2089:21, 2091:6, 2092:5, 2093:18, 2097:18, 2098:15, 2099:11, 2099:14, 2100:18, 2101:23, 2104:22, 2107:1, 2111:24, 2112:20, 2116:8, 2122:23, 2124:12, 2129:21, 2129:25, 2130:7, 2132:18, 2136:5, 2138:2, 2139:15, 2139:24, 2141:24, 2143:23, 2147:13, 2148:21, 2150:1, 2155:12, 2158:4, 2164:7, 2164:19, 2165:19, 2167:16, 2168:19, 2170:4, 2175:15, 2179:16, 2180:1, 2180:12, 2180:21, 2184:6, 2185:18, 2189:7, 2192:19, 2194:13, 2207:7, 2207:15, 2210:10, 2211:8, 2215:21, 2220:18, 2228:18, 2229:14, 2240:15 JURY ^[2] - 2076:2, 2076:4</p>	<p>keyboards ^[2] - 2126:15, 2147:8 killer ^[2] - 2227:22, 2227:25 kind ^[14] - 2088:16, 2090:22, 2094:6, 2108:19, 2111:7, 2113:12, 2114:22, 2135:14, 2150:10, 2152:12, 2177:2, 2191:20, 2197:3, 2241:12 kinds ^[11] - 2096:21, 2103:11, 2127:9, 2165:15, 2170:6, 2184:17, 2185:21, 2209:6, 2212:17, 2227:6, 2234:22 kit ^[3] - 2180:7, 2183:24, 2192:5 Kit ^[9] - 2183:21, 2185:2, 2185:14, 2186:8, 2186:10, 2191:24, 2193:20, 2200:24, 2206:9 knowledge ^[6] - 2078:14, 2078:21, 2078:22, 2079:5, 2193:20, 2198:10 known ^[23] - 2176:3, 2184:23, 2192:2, 2192:4, 2194:25, 2201:2, 2201:3, 2207:21, 2207:23, 2208:5, 2209:2, 2209:9, 2212:16, 2214:22, 2215:3, 2215:9, 2216:25, 2218:20, 2219:5, 2219:24, 2220:1, 2220:5, 2220:6 knows ^[4] - 2105:23, 2220:15, 2228:17</p>	<p>2086:15, 2086:17 layout ^[1] - 2100:19 LCD ^[1] - 2215:3 lead ^[1] - 2148:13 leading ^[1] - 2148:11 learned ^[2] - 2220:24, 2240:20 least ^[16] - 2088:22, 2089:1, 2096:3, 2098:18, 2113:18, 2117:13, 2120:15, 2124:1, 2136:22, 2138:15, 2138:18, 2162:16, 2187:10, 2189:12, 2198:22, 2229:5 left ^[27] - 2094:14, 2099:16, 2104:25, 2107:25, 2113:3, 2125:17, 2126:15, 2126:25, 2130:12, 2131:19, 2136:15, 2136:17, 2136:20, 2137:23, 2138:2, 2144:23, 2156:8, 2163:6, 2177:17, 2180:18, 2196:24, 2208:6, 2211:19, 2212:8, 2212:20, 2217:7, 2229:22 left-hand ^[6] - 2113:3, 2125:17, 2131:19, 2138:2, 2156:8, 2177:17 left-pointing ^[4] - 2196:24, 2211:19, 2212:8, 2212:20 letter ^[1] - 2127:8 letters ^[2] - 2126:13, 2126:14 levels ^[1] - 2124:2 library ^[6] - 2080:6, 2163:7, 2163:10, 2163:14, 2165:4 license ^[3] - 2225:5, 2225:18, 2225:22 licenses ^[2] - 2224:24, 2225:1 lies ^[1] - 2189:9 light ^[1] - 2206:13 likely ^[3] - 2219:7, 2241:2 limine ^[1] - 2079:18 limitation ^[85] - 2091:5, 2091:7, 2091:16, 2109:12, 2110:21, 2110:22, 2111:19, 2112:20, 2112:22, 2112:23, 2115:13, 2117:20, 2118:3, 2118:5, 2118:13, 2120:13, 2120:14, 2124:13, 2125:4, 2125:10, 2125:14, 2125:16, 2128:14, 2128:25, 2132:25, 2139:20, 2139:21, 2140:5, 2140:18, 2141:20, 2143:1, 2144:18, 2145:20, 2145:23, 2146:12, 2146:17, 2147:10, 2147:17, 2154:9, 2155:7, 2157:11, 2159:14, 2159:15, 2162:12, 2166:22, 2168:16, 2169:8, 2170:11, 2174:20, 2174:25, 2175:17, 2179:15, 2180:25, 2181:4, 2181:24, 2182:9, 2185:11, 2185:16, 2186:13, 2186:16, 2186:18, 2186:19, 2187:6, 2187:12, 2187:14, 2187:22, 2187:25, 2188:5, 2188:6, 2189:14, 2190:12, 2193:3, 2193:4, 2194:14, 2195:11, 2195:13, 2195:15, 2203:6, 2205:19, 2206:17, 2230:22, 2234:6, 2234:11, 2234:13 limitations ^[53] - 2090:2, 2096:24, 2097:2, 2097:3, 2097:7, 2110:4, 2110:25, 2125:10, 2132:22, 2132:24, 2134:7, 2134:10, 2145:14, 2145:15, 2153:17, 2158:1, 2162:4, 2163:1, 2163:20, 2166:9, 2167:3, 2168:1,</p>
K		
<p>keep ^[11] - 2091:12, 2093:2, 2093:17, 2100:10, 2114:6, 2140:4, 2141:8, 2148:10, 2149:14, 2208:16, 2229:11 keeping ^[1] - 2076:22 kept ^[6] - 2078:23, 2088:18, 2144:13, 2228:4, 2228:9, 2230:2</p>	<p>keyboards ^[2] - 2126:15, 2147:8 killer ^[2] - 2227:22, 2227:25 kind ^[14] - 2088:16, 2090:22, 2094:6, 2108:19, 2111:7, 2113:12, 2114:22, 2135:14, 2150:10, 2152:12, 2177:2, 2191:20, 2197:3, 2241:12 kinds ^[11] - 2096:21, 2103:11, 2127:9, 2165:15, 2170:6, 2184:17, 2185:21, 2209:6, 2212:17, 2227:6, 2234:22 kit ^[3] - 2180:7, 2183:24, 2192:5 Kit ^[9] - 2183:21, 2185:2, 2185:14, 2186:8, 2186:10, 2191:24, 2193:20, 2200:24, 2206:9 knowledge ^[6] - 2078:14, 2078:21, 2078:22, 2079:5</p>	

<p>2172:17, 2172:25, 2173:1, 2173:19, 2174:10, 2174:14, 2174:21, 2175:18, 2175:24, 2178:20, 2179:1, 2179:4, 2182:20, 2183:7, 2183:10, 2189:8, 2190:14, 2191:12, 2196:13, 2198:18, 2199:19, 2202:23, 2205:11, 2221:2, 2221:3, 2221:8, 2221:18, 2221:22, 2222:9, 2222:14</p> <p>limited ^[1] - 2077:16</p> <p>line ^[5] - 2101:22, 2106:12, 2106:14, 2133:10, 2151:18</p> <p>lined ^[1] - 2121:25</p> <p>lines ^[3] - 2093:14, 2098:23, 2099:1</p> <p>link ^[8] - 2103:2, 2103:3, 2103:4, 2104:4, 2118:18, 2118:22, 2119:19, 2141:14</p> <p>linked ^[1] - 2119:18</p> <p>linking ^[1] - 2082:15</p> <p>list ^[13] - 2137:17, 2137:19, 2137:21, 2153:2, 2163:14, 2180:3, 2213:5, 2215:25, 2232:4, 2232:6, 2234:12, 2236:7, 2236:18</p> <p>listen ^[1] - 2154:22</p> <p>listener ^[15] - 2156:16, 2156:17, 2157:18, 2160:10, 2162:13, 2162:20, 2162:22, 2162:24, 2165:3, 2193:9, 2199:25, 2202:10, 2218:23, 2219:2, 2219:3</p> <p>listener-selected ^[2] - 2156:16, 2193:9</p> <p>listing ^[9] - 2079:13, 2093:22, 2156:4, 2156:6, 2194:20, 2194:23, 2222:3, 2223:13, 2236:23</p> <p>listings ^[3] - 2194:24, 2214:21, 2222:5</p> <p>literally ^[7] - 2089:23, 2097:4, 2097:21, 2184:10, 2185:8, 2189:10, 2218:2</p> <p>lived ^[1] - 2102:3</p> <p>load ^[3] - 2122:15, 2154:14, 2161:11</p> <p>local ^[9] - 2104:3, 2119:18, 2119:23, 2119:24, 2144:6, 2144:14, 2146:2, 2146:3, 2146:4</p> <p>locally ^[1] - 2144:15</p> <p>locate ^[2] - 2158:9, 2160:23</p> <p>locates ^[2] - 2209:19, 2209:22</p> <p>Location ^[1] - 2226:10</p> <p>location ^[1] - 2226:12</p> <p>LocType ^[25] - 2084:9, 2089:13, 2091:1, 2091:22, 2092:19, 2152:11, 2158:10, 2158:20, 2159:2, 2159:5, 2159:8, 2160:24, 2161:9, 2161:19, 2161:22, 2189:23, 2190:1, 2190:2, 2190:6, 2190:9, 2190:15, 2190:17, 2190:18, 2198:16, 2234:17</p> <p>LocTypes ^[2] - 2159:12, 2234:22</p> <p>Loeb ^[6] - 2217:18, 2218:12, 2218:19, 2219:17, 2222:13, 2222:15</p> <p>Logan ^[1] - 2226:24</p> <p>Logan's ^[1] - 2227:3</p> <p>look ^[27] - 2076:17, 2092:4, 2094:5, 2095:3, 2096:14, 2101:4, 2101:5, 2113:5, 2122:2, 2135:2, 2137:18, 2150:7, 2151:9, 2156:1, 2163:10,</p>	<p>2163:11, 2168:18, 2170:11, 2172:9, 2183:24, 2201:21, 2206:9, 2211:9, 2220:17, 2223:13, 2223:15, 2225:12</p> <p>looked ^[9] - 2100:22, 2122:3, 2140:12, 2142:22, 2178:14, 2183:13, 2185:2, 2225:6, 2225:13</p> <p>looking ^[34] - 2092:6, 2094:12, 2095:4, 2098:14, 2100:3, 2100:19, 2124:11, 2128:4, 2142:1, 2142:14, 2145:22, 2146:16, 2147:17, 2153:3, 2153:21, 2154:8, 2156:2, 2163:10, 2176:24, 2178:3, 2181:11, 2183:9, 2185:1, 2210:18, 2212:2, 2212:4, 2212:5, 2212:9, 2213:9, 2218:13, 2225:13, 2228:25, 2234:16, 2240:9</p> <p>looks ^[10] - 2101:5, 2102:11, 2102:21, 2106:12, 2108:2, 2113:25, 2114:21, 2144:7, 2230:4, 2230:5</p> <p>loop ^[2] - 2091:12, 2148:2</p> <p>loud ^[1] - 2241:13</p> <p>love ^[3] - 2163:10, 2163:16, 2163:18</p> <p>low ^[1] - 2083:4</p> <p>low-power ^[1] - 2083:4</p> <p>lower ^[1] - 2131:11</p> <p>Lucent ^[3] - 2238:14, 2238:17, 2238:22</p> <p>Lucent/Gateway ^[1] - 2238:15</p> <p>Lucent/Microsoft ^[1] - 2238:16</p> <p>lunch ^[1] - 2241:4</p> <p>LyricTime ^[2] - 2218:17, 2218:21</p>	<p>2174:22, 2175:10, 2178:2, 2178:15, 2182:19, 2182:24, 2183:1, 2183:3, 2187:1, 2188:1, 2188:2, 2188:9, 2194:15, 2198:22, 2198:24, 2199:5, 2206:2, 2206:18, 2215:20, 2219:18, 2219:21, 2220:9, 2223:7, 2223:8, 2224:3, 2224:6, 2224:10, 2224:11</p> <p>manufacture ^[1] - 2213:14</p> <p>March ^[2] - 2138:20, 2139:4</p> <p>mark ^[1] - 2101:3</p> <p>marked ^[3] - 2079:16, 2092:9, 2210:9</p> <p>market ^[3] - 2117:9, 2122:9, 2239:3</p> <p>mass ^[6] - 2117:9, 2117:17, 2129:5, 2129:13, 2173:13, 2205:6</p> <p>Material ^[1] - 2226:9</p> <p>material ^[3] - 2148:23, 2167:20, 2227:7</p> <p>mathematical ^[1] - 2228:11</p> <p>matter ^[1] - 2232:20</p> <p>mean ^[17] - 2076:17, 2089:24, 2106:13, 2108:7, 2111:6, 2117:1, 2126:13, 2155:12, 2175:3, 2183:4, 2191:22, 2212:24, 2216:6, 2238:12, 2238:21, 2241:2, 2241:12</p> <p>means ^[67] - 2086:3, 2086:18, 2091:14, 2100:1, 2105:4, 2111:9, 2111:13, 2112:14, 2112:15, 2112:19, 2112:22, 2117:2, 2117:21, 2118:6, 2118:11, 2118:12, 2118:13, 2120:3, 2121:14, 2125:10, 2125:11, 2125:13, 2125:15, 2128:14, 2128:19, 2128:21, 2128:22, 2128:25, 2130:13, 2139:25, 2140:1, 2155:13, 2168:1, 2168:4, 2168:5, 2168:6, 2168:8, 2168:9, 2168:17, 2168:19, 2168:21, 2168:23, 2169:12, 2169:13, 2171:6, 2171:13, 2171:18, 2173:15, 2173:17, 2173:18, 2173:22, 2183:6, 2183:25, 2190:12, 2191:2, 2203:24, 2203:25, 2204:2, 2204:6, 2204:10, 2205:10, 2206:11, 2210:16, 2231:15</p> <p>means-plus-function ^[6] - 2086:3, 2111:9, 2111:13, 2118:13, 2128:25, 2168:23</p> <p>meant ^[1] - 2117:17</p> <p>mechanical ^[1] - 2126:6</p> <p>media ^[3] - 2129:6, 2169:5, 2228:23</p> <p>medium ^[1] - 2108:23</p> <p>meet ^[3] - 2115:13, 2183:7, 2190:14</p> <p>meeting ^[2] - 2120:13, 2120:14</p> <p>meets ^[2] - 2140:18, 2163:20</p> <p>megabits ^[3] - 2121:7, 2121:9, 2122:15</p> <p>megahertz ^[1] - 2150:11</p> <p>memory ^[17] - 2082:11, 2082:15, 2082:20, 2083:5, 2083:13, 2083:15, 2093:24, 2099:23, 2099:24, 2101:8, 2103:9, 2115:5, 2145:20, 2164:21, 2186:16, 2201:22, 2235:21</p> <p>mention ^[3] - 2080:9, 2197:18, 2198:5</p> <p>mentioned ^[7] - 2084:1, 2099:9, 2107:24, 2119:7, 2122:21, 2193:6, 2235:21</p>
M		
<p>machine ^[7] - 2143:11, 2145:3, 2147:24, 2153:6, 2161:14, 2183:19, 2184:14</p> <p>Machinery ^[1] - 2218:2</p> <p>machines ^[1] - 2137:10</p> <p>Macintosh ^[1] - 2212:19</p> <p>magneto ^[1] - 2169:17</p> <p>magneto-optical ^[1] - 2169:17</p> <p>magnitude ^[1] - 2121:11</p> <p>main ^[3] - 2100:25, 2201:22, 2231:10</p> <p>manipulated ^[1] - 2143:6</p> <p>manipulation ^[1] - 2083:14</p> <p>manual ^[94] - 2137:23, 2138:4, 2138:8, 2138:15, 2139:16, 2140:18, 2140:20, 2141:3, 2142:1, 2142:3, 2142:16, 2143:21, 2143:24, 2144:19, 2144:25, 2145:16, 2145:17, 2145:22, 2145:25, 2146:14, 2146:16, 2146:18, 2146:23, 2147:3, 2147:6, 2147:7, 2147:16, 2147:21, 2150:2, 2150:8, 2150:22, 2151:6, 2152:1, 2152:5, 2152:6, 2153:3, 2153:17, 2155:5, 2155:7, 2155:9, 2156:18, 2158:13, 2158:23, 2161:1, 2162:3, 2162:5, 2162:25, 2163:20, 2164:2, 2167:11, 2169:22, 2169:24, 2170:1, 2170:5, 2170:9, 2170:12, 2172:17, 2172:18, 2172:19, 2173:1, 2174:6, 2174:7, 2174:10, 2174:17,</p>		

<p>menus [2] - 2215:3, 2215:6</p> <p>mess [1] - 2076:12</p> <p>met [12] - 2097:7, 2110:5, 2110:8, 2111:1, 2132:24, 2132:25, 2134:8, 2134:10, 2143:21, 2144:19, 2147:17, 2190:9</p> <p>metadata [4] - 2227:4, 2227:5, 2227:9</p> <p>method [11] - 2081:7, 2083:21, 2089:12, 2111:5, 2190:20, 2191:1, 2192:10, 2193:12, 2193:16, 2198:18, 2198:19</p> <p>methods [2] - 2147:11, 2227:3</p> <p>Michel's [1] - 2239:1</p> <p>microphone [2] - 2100:10, 2113:9</p> <p>mid [1] - 2212:23</p> <p>middle [3] - 2081:15, 2144:10, 2221:1</p> <p>might [24] - 2077:5, 2079:3, 2086:10, 2087:14, 2092:11, 2101:14, 2114:4, 2119:14, 2130:22, 2148:13, 2148:15, 2155:2, 2175:23, 2177:12, 2192:17, 2206:24, 2212:13, 2219:7, 2223:19, 2228:11, 2235:20, 2236:9, 2238:5</p> <p>million [2] - 2121:8, 2121:10</p> <p>mind [6] - 2090:23, 2110:14, 2149:14, 2229:5, 2229:8, 2229:11</p> <p>minor [2] - 2108:23, 2124:6</p> <p>minute [3] - 2086:25, 2088:4, 2138:25</p> <p>minutes [8] - 2083:18, 2121:18, 2122:16, 2122:20, 2164:15, 2166:7, 2227:15</p> <p>misalignment [1] - 2123:9</p> <p>missed [1] - 2167:3</p> <p>missing [9] - 2176:4, 2186:2, 2186:6, 2199:7, 2201:4, 2206:5, 2206:6, 2231:11</p> <p>misspoke [2] - 2092:14, 2139:8</p> <p>MIT [3] - 2079:1, 2079:8, 2080:6</p> <p>mode [4] - 2188:24, 2189:2, 2217:5, 2217:6</p> <p>model [1] - 2218:25</p> <p>modem [9] - 2101:12, 2101:14, 2101:17, 2101:21, 2102:2, 2102:3, 2104:7, 2169:3, 2169:4</p> <p>moment [2] - 2173:16, 2202:1</p> <p>monthly [1] - 2101:15</p> <p>morning [8] - 2080:20, 2080:24, 2081:3, 2081:4, 2197:24, 2229:13, 2241:3, 2241:5</p> <p>most [4] - 2083:7, 2101:9, 2126:19, 2189:19</p> <p>mostly [2] - 2078:16, 2137:19</p> <p>motion [4] - 2079:18, 2230:13, 2232:7, 2235:12</p> <p>motions [3] - 2076:9, 2076:25, 2077:13</p> <p>motivated [3] - 2184:23, 2186:3, 2186:10</p> <p>mounted [2] - 2116:19, 2116:22</p> <p>mouse [17] - 2104:5, 2107:7, 2107:17, 2107:21, 2108:2, 2108:11, 2108:17, 2108:18, 2108:19, 2108:21, 2156:23,</p>	<p>2165:8, 2168:7, 2172:7, 2188:2, 2196:21</p> <p>move [33] - 2086:7, 2104:21, 2111:22, 2117:20, 2125:9, 2127:16, 2127:19, 2127:21, 2127:22, 2128:13, 2135:14, 2144:17, 2145:19, 2146:15, 2153:20, 2155:16, 2170:18, 2172:12, 2192:24, 2192:25, 2193:1, 2194:3, 2199:10, 2206:15, 2206:16, 2207:16, 2213:4, 2215:25, 2216:5, 2216:10, 2217:5, 2225:21, 2235:2</p> <p>moved [1] - 2106:20</p> <p>moves [2] - 2127:18, 2153:15</p> <p>moving [9] - 2093:17, 2126:10, 2127:6, 2127:20, 2128:2, 2141:8, 2154:18, 2195:17, 2230:5</p> <p>MP3 [1] - 2086:3</p> <p>MR [157] - 2076:14, 2077:10, 2077:25, 2079:22, 2080:11, 2080:23, 2081:2, 2084:25, 2085:3, 2085:6, 2085:7, 2085:11, 2085:15, 2085:18, 2086:7, 2086:12, 2087:3, 2087:5, 2087:7, 2087:11, 2087:13, 2088:2, 2088:6, 2091:25, 2092:3, 2092:16, 2093:3, 2093:10, 2093:16, 2094:11, 2094:13, 2095:14, 2095:22, 2099:6, 2099:8, 2100:7, 2100:12, 2104:15, 2104:19, 2106:9, 2106:11, 2109:8, 2109:10, 2109:11, 2109:13, 2109:14, 2109:16, 2109:20, 2109:21, 2122:3, 2122:6, 2124:24, 2125:1, 2130:4, 2130:9, 2130:10, 2130:24, 2131:5, 2132:9, 2132:11, 2135:17, 2135:20, 2135:22, 2135:24, 2136:1, 2139:1, 2139:3, 2142:17, 2143:2, 2148:8, 2148:16, 2148:18, 2149:3, 2149:5, 2149:23, 2149:24, 2176:19, 2176:23, 2177:6, 2177:8, 2177:14, 2177:16, 2177:24, 2178:1, 2178:7, 2178:9, 2180:6, 2180:15, 2180:17, 2197:20, 2197:23, 2198:2, 2198:6, 2198:7, 2207:1, 2207:8, 2207:11, 2207:12, 2210:5, 2210:8, 2213:19, 2213:23, 2214:1, 2214:3, 2214:7, 2214:10, 2217:12, 2217:14, 2217:20, 2217:23, 2218:9, 2218:11, 2223:16, 2223:23, 2224:16, 2224:18, 2227:10, 2227:14, 2227:19, 2227:24, 2229:20, 2229:24, 2230:7, 2230:12, 2230:16, 2230:25, 2232:12, 2232:15, 2232:19, 2233:6, 2233:8, 2233:13, 2233:19, 2234:3, 2235:3, 2235:18, 2235:23, 2236:2, 2236:10, 2237:1, 2237:8, 2237:14, 2237:21, 2238:4, 2238:14, 2238:19, 2238:25, 2239:15, 2239:19, 2239:23, 2239:25, 2240:10, 2240:16, 2240:20, 2241:5, 2241:7, 2241:12</p> <p>MS [1] - 2109:17</p> <p>Mullendore [2] - 2234:1, 2236:8</p> <p>Multimedia [1] - 2217:17</p> <p>music [19] - 2082:16, 2082:25,</p>	<p>2083:16, 2083:17, 2093:22, 2097:22, 2143:13, 2144:8, 2148:3, 2150:16, 2163:12, 2184:17, 2186:21, 2187:12, 2187:19, 2215:4, 2218:22, 2218:24, 2221:14</p> <p>Music [1] - 2218:18</p> <p>Musicshop [2] - 2212:18, 2215:20</p> <p>must [2] - 2110:23, 2140:7</p>
N		
<p>name [5] - 2081:20, 2122:11, 2165:16, 2185:9, 2217:18</p> <p>namely [2] - 2079:12, 2119:4</p> <p>nano [8] - 2082:4, 2082:9, 2084:4, 2086:8, 2086:20, 2088:8, 2088:25, 2089:8</p> <p>nanos [1] - 2130:25</p> <p>natural [1] - 2194:12</p> <p>navigating [1] - 2154:20</p> <p>navigation [1] - 2083:14</p> <p>Nawrocki's [1] - 2237:22</p> <p>near [3] - 2078:14, 2078:20, 2217:21</p> <p>necessarily [2] - 2078:22, 2228:10</p> <p>necessity [1] - 2077:12</p> <p>need [11] - 2077:1, 2087:24, 2087:25, 2094:4, 2133:11, 2190:18, 2230:3, 2231:20, 2231:21, 2237:11, 2239:3</p> <p>needs [2] - 2228:10, 2240:14</p> <p>Net [1] - 2228:22</p> <p>network [6] - 2101:19, 2102:20, 2103:19, 2103:23, 2144:6, 2144:16</p> <p>networked [4] - 2142:4, 2142:6, 2142:7</p> <p>networking [1] - 2142:13</p> <p>networks [4] - 2102:19, 2103:16, 2103:18, 2220:23</p> <p>never [4] - 2078:19, 2079:2, 2088:25, 2093:1</p> <p>new [4] - 2078:9, 2078:10, 2088:16, 2124:15</p> <p>news [2] - 2104:3, 2104:12</p> <p>next [98] - 2076:17, 2077:8, 2083:10, 2086:24, 2089:2, 2091:5, 2095:4, 2095:5, 2097:16, 2097:18, 2104:22, 2111:25, 2117:20, 2125:9, 2128:13, 2128:17, 2136:3, 2136:21, 2141:10, 2141:16, 2142:14, 2144:10, 2147:10, 2150:14, 2151:1, 2152:3, 2152:17, 2152:20, 2154:7, 2154:17, 2155:16, 2155:17, 2156:13, 2157:11, 2157:25, 2158:9, 2158:24, 2158:25, 2159:14, 2161:4, 2161:18, 2161:21, 2163:4, 2164:5, 2168:14, 2170:22, 2170:24, 2173:5, 2173:7, 2173:14, 2173:21, 2174:1, 2175:12, 2178:21, 2178:25, 2180:22, 2181:7, 2181:16, 2182:2, 2183:16, 2186:13, 2186:15, 2187:6, 2187:8, 2187:16, 2187:17, 2187:22, 2187:24, 2188:5, 2188:23, 2194:3, 2195:11, 2195:13, 2195:25, 2196:16,</p>		

<p>2197:6, 2197:8, 2200:6, 2201:13, 2202:13, 2203:19, 2204:18, 2205:15, 2207:13, 2207:14, 2207:18, 2209:12, 2209:22, 2213:5, 2214:19, 2216:20, 2223:19, 2223:20, 2224:23, 2225:21, 2225:22, 2235:1</p> <p>next/fast [1] - 2086:17</p> <p>next/fast-forward [1] - 2086:17</p> <p>nice [3] - 2101:2, 2183:20, 2210:12</p> <p>nickel [1] - 2208:11</p> <p>nine [1] - 2122:18</p> <p>Nineties [2] - 2093:22, 2212:23</p> <p>nonaccused [2] - 2237:16, 2237:17</p> <p>none [2] - 2097:14, 2233:11</p> <p>normal [1] - 2183:13</p> <p>NOT [1] - 2076:4</p> <p>Note [2] - 2154:14, 2161:10</p> <p>note [15] - 2081:21, 2094:11, 2099:14, 2101:12, 2112:20, 2115:24, 2118:10, 2138:22, 2150:14, 2151:7, 2151:17, 2152:18, 2165:8, 2191:13, 2209:13</p> <p>notebook [3] - 2099:14, 2105:22, 2112:21</p> <p>notebooks [2] - 2135:18, 2179:9</p> <p>noted [2] - 2116:13, 2142:2</p> <p>NOTES [1] - 2076:1</p> <p>notes [1] - 2078:4</p> <p>nothing [5] - 2079:6, 2087:18, 2231:6, 2235:7, 2240:21</p> <p>notice [2] - 2171:13, 2184:19</p> <p>noticed [6] - 2124:18, 2189:21, 2189:22, 2191:21, 2200:14, 2207:25</p> <p>notion [1] - 2238:6</p> <p>notoriously [1] - 2215:3</p> <p>Novacek [9] - 2137:4, 2137:5, 2142:5, 2143:6, 2144:4, 2146:22, 2147:8, 2152:18, 2156:20</p> <p>Novacek's [3] - 2138:6, 2154:11, 2223:25</p> <p>novel [2] - 2124:15, 2124:19</p> <p>Number [3] - 2218:5, 2230:20, 2233:19</p> <p>number [29] - 2076:8, 2077:16, 2082:12, 2093:6, 2093:25, 2097:19, 2098:19, 2102:19, 2115:23, 2128:10, 2132:22, 2132:23, 2134:6, 2134:9, 2142:24, 2151:17, 2152:19, 2152:22, 2153:10, 2153:13, 2169:2, 2190:6, 2190:8, 2196:17, 2201:17, 2212:24, 2215:12, 2217:21, 2219:15</p> <p>numbers [6] - 2100:24, 2118:8, 2197:22, 2197:25, 2198:5, 2221:18</p>	<p>obvious [15] - 2078:4, 2175:20, 2180:5, 2192:1, 2192:8, 2194:2, 2198:25, 2199:1, 2199:7, 2199:9, 2201:1, 2203:13, 2206:13, 2220:12, 2229:2</p> <p>Obvious [1] - 2191:22</p> <p>obviously [1] - 2080:13</p> <p>obviousness [8] - 2176:2, 2185:17, 2185:19, 2186:1, 2193:16, 2207:17, 2207:20, 2220:21</p> <p>October [4] - 2138:14, 2138:23, 2139:7, 2178:23</p> <p>OF [2] - 2081:1, 2241:21</p> <p>off-the-shelf [1] - 2117:16</p> <p>offered [6] - 2087:7, 2214:5, 2214:6, 2233:8, 2233:9, 2235:7</p> <p>offering [1] - 2230:19</p> <p>Office [15] - 2136:7, 2136:12, 2137:14, 2178:11, 2214:24, 2214:25, 2215:1, 2215:2, 2215:7, 2222:20, 2222:23, 2223:4, 2223:6, 2223:7, 2224:12</p> <p>office [1] - 2119:20</p> <p>often [1] - 2105:21</p> <p>old [8] - 2088:18, 2101:16, 2114:4, 2184:8, 2208:24, 2209:6, 2210:12</p> <p>older [2] - 2155:9, 2177:13</p> <p>ON [1] - 2241:19</p> <p>on-air [3] - 2144:23, 2145:3, 2146:3</p> <p>once [21] - 2083:17, 2094:7, 2094:25, 2119:14, 2120:6, 2144:15, 2150:9, 2161:6, 2165:20, 2171:1, 2171:18, 2172:23, 2180:24, 2184:24, 2195:7, 2216:7, 2216:8, 2216:9, 2216:12, 2238:9, 2238:18</p> <p>one [120] - 2076:10, 2076:21, 2077:5, 2082:10, 2082:23, 2083:10, 2084:7, 2086:10, 2087:1, 2087:9, 2090:23, 2091:3, 2093:24, 2094:24, 2095:5, 2096:15, 2098:3, 2098:4, 2099:19, 2099:23, 2102:21, 2102:23, 2106:12, 2106:14, 2109:1, 2112:11, 2112:12, 2112:15, 2113:25, 2117:6, 2118:15, 2119:11, 2121:16, 2121:20, 2121:22, 2121:24, 2122:1, 2123:21, 2125:21, 2127:15, 2127:17, 2127:20, 2128:1, 2128:9, 2132:7, 2132:8, 2132:24, 2133:11, 2135:14, 2136:3, 2137:18, 2139:23, 2140:8, 2141:17, 2147:5, 2147:10, 2147:23, 2148:6, 2151:4, 2156:17, 2157:7, 2158:1, 2165:6, 2166:11, 2166:23, 2167:8, 2171:6, 2173:23, 2180:25, 2185:23, 2187:10, 2187:25, 2188:6, 2190:16, 2191:3, 2191:25, 2192:23, 2193:9, 2193:10, 2193:21, 2194:8, 2196:22, 2197:6, 2198:11, 2202:11, 2203:5, 2206:22, 2208:3, 2208:5, 2208:8, 2208:13, 2208:18, 2210:16, 2211:1, 2211:14, 2211:22, 2220:7, 2221:22, 2223:11, 2225:3, 2227:22, 2228:4, 2228:7, 2229:5, 2230:10, 2231:9, 2231:10, 2231:18, 2234:4, 2234:14, 2235:17,</p>	<p>2236:10, 2237:14, 2238:8, 2238:24</p> <p>one-hundredth [1] - 2121:16</p> <p>ones [9] - 2076:12, 2077:5, 2077:20, 2087:25, 2179:4, 2179:5, 2179:9, 2196:23, 2232:2</p> <p>Opcode [1] - 2215:20</p> <p>open [4] - 2129:25, 2180:12, 2210:13, 2229:11</p> <p>OPEN [1] - 2076:4</p> <p>opened [2] - 2094:19, 2102:25</p> <p>opener [1] - 2123:3</p> <p>operated [1] - 2083:23</p> <p>operating [1] - 2084:3</p> <p>Operating [1] - 2206:10</p> <p>operator [2] - 2159:10, 2163:14</p> <p>operators [1] - 2224:3</p> <p>opinion [66] - 2089:11, 2089:15, 2096:4, 2096:8, 2097:1, 2109:3, 2110:3, 2110:18, 2111:2, 2115:22, 2120:17, 2125:3, 2126:21, 2126:22, 2127:1, 2129:11, 2131:16, 2131:17, 2140:17, 2144:18, 2145:13, 2145:14, 2146:11, 2149:11, 2149:12, 2150:21, 2155:4, 2162:1, 2163:19, 2167:6, 2169:21, 2172:16, 2174:7, 2174:12, 2174:17, 2185:12, 2186:7, 2189:25, 2190:4, 2190:11, 2190:25, 2193:15, 2193:19, 2198:12, 2198:14, 2198:24, 2199:4, 2199:18, 2200:15, 2200:22, 2203:11, 2203:13, 2206:2, 2219:19, 2223:1, 2225:17, 2225:20, 2225:23, 2226:6, 2226:16, 2226:24, 2231:3, 2232:4, 2233:9, 2239:1, 2239:5</p> <p>opinions [4] - 2133:6, 2169:7, 2179:6, 2225:9</p> <p>opportunity [1] - 2137:22</p> <p>opposed [3] - 2106:21, 2185:17, 2185:19</p> <p>optical [5] - 2121:24, 2123:1, 2129:6, 2169:5, 2169:17</p> <p>options [5] - 2096:21, 2169:2, 2169:6, 2169:18, 2215:5</p> <p>order [5] - 2082:16, 2155:23, 2170:16, 2175:24, 2230:19</p> <p>ordered [1] - 2165:25</p> <p>orders [1] - 2121:11</p> <p>ordinary [3] - 2121:21, 2176:16, 2193:21</p> <p>original [5] - 2122:11, 2122:12, 2131:12, 2209:3, 2210:16</p> <p>ourselves [1] - 2083:20</p> <p>outline [1] - 2078:9</p> <p>output [4] - 2146:16, 2173:17, 2187:9, 2205:10</p> <p>outputs [1] - 2146:19</p> <p>outside [5] - 2101:13, 2102:2, 2102:5, 2113:6, 2240:14</p> <p>overall [4] - 2192:10, 2198:18, 2198:19, 2199:8</p> <p>overruled [2] - 2148:14, 2149:4</p>
O		
<p>objecting [2] - 2076:18, 2087:10</p> <p>objection [6] - 2079:11, 2085:7, 2109:8, 2109:15, 2148:9</p> <p>objections [4] - 2076:11, 2087:17, 2231:4, 2231:5</p> <p>Objects [1] - 2226:9</p>		

<p>own [1] - 2184:14</p> <p>P</p> <p>p.m [1] - 2241:17</p> <p>PA [1] - 2235:7</p> <p>Pacific [1] - 2238:9</p> <p>page [42] - 2079:15, 2085:6, 2086:7, 2099:15, 2103:12, 2104:3, 2104:12, 2106:10, 2122:5, 2130:14, 2140:19, 2142:19, 2142:22, 2143:12, 2145:24, 2146:18, 2150:7, 2151:5, 2152:5, 2153:5, 2154:13, 2156:7, 2163:13, 2177:15, 2181:12, 2187:3, 2187:5, 2187:20, 2188:24, 2194:16, 2195:8, 2209:15, 2212:19, 2215:21, 2216:16, 2218:15, 2218:16, 2219:15, 2223:18, 2223:19, 2223:20</p> <p>pages [16] - 2077:16, 2085:12, 2085:13, 2087:17, 2103:11, 2142:3, 2143:8, 2144:1, 2147:20, 2163:4, 2219:11, 2224:2, 2224:6, 2224:13</p> <p>paragraph [2] - 2085:20, 2086:13</p> <p>paraphrasing [1] - 2097:22</p> <p>parked [1] - 2119:20</p> <p>part [32] - 2077:13, 2079:7, 2085:4, 2090:18, 2096:2, 2096:17, 2098:17, 2145:16, 2148:19, 2149:11, 2149:12, 2149:25, 2150:3, 2154:1, 2156:13, 2162:23, 2165:12, 2183:19, 2188:12, 2193:2, 2193:3, 2193:5, 2193:6, 2202:2, 2207:14, 2209:3, 2209:23, 2228:13, 2234:24, 2236:17, 2237:17, 2238:13</p> <p>particular [37] - 2086:19, 2086:23, 2090:20, 2090:21, 2091:14, 2091:20, 2097:23, 2103:6, 2104:13, 2105:24, 2127:17, 2151:2, 2151:3, 2151:17, 2151:24, 2152:9, 2152:20, 2153:12, 2154:19, 2159:8, 2163:11, 2163:15, 2170:11, 2176:8, 2176:9, 2193:25, 2197:2, 2209:14, 2218:4, 2218:12, 2221:8, 2221:16, 2224:25, 2232:24, 2238:25</p> <p>particularly [4] - 2126:3, 2167:7, 2198:15, 2233:15</p> <p>PARTIES [1] - 2076:4</p> <p>parties [3] - 2129:25, 2180:12, 2239:17</p> <p>parts [6] - 2100:24, 2100:25, 2114:23, 2114:24, 2190:25, 2202:4</p> <p>pass [3] - 2120:4, 2120:6, 2227:10</p> <p>passed [1] - 2135:18</p> <p>passive [1] - 2108:15</p> <p>past [3] - 2079:10, 2162:19, 2208:11</p> <p>patent [147] - 2089:22, 2090:3, 2090:13, 2090:19, 2091:6, 2091:13, 2091:15, 2092:1, 2092:5, 2093:7, 2096:15, 2096:25, 2098:4, 2098:5, 2098:6, 2098:10, 2098:13, 2098:16, 2098:17, 2098:20, 2099:7, 2100:4, 2100:13, 2100:17, 2110:1, 2111:3,</p>	<p>2111:22, 2112:23, 2113:1, 2117:25, 2119:6, 2119:7, 2119:8, 2119:11, 2119:15, 2120:1, 2125:11, 2127:13, 2128:18, 2132:15, 2132:23, 2133:22, 2134:3, 2134:7, 2134:11, 2136:10, 2137:21, 2137:23, 2137:25, 2138:15, 2138:19, 2138:21, 2139:11, 2139:17, 2140:4, 2141:9, 2141:10, 2141:21, 2145:15, 2146:12, 2152:7, 2153:21, 2155:2, 2155:5, 2155:20, 2156:24, 2160:3, 2160:25, 2162:2, 2162:7, 2162:10, 2163:21, 2164:6, 2164:16, 2165:11, 2165:18, 2165:19, 2165:23, 2166:1, 2166:3, 2166:8, 2166:10, 2166:22, 2167:4, 2167:7, 2167:10, 2167:12, 2167:13, 2167:17, 2169:8, 2169:20, 2170:19, 2171:12, 2172:14, 2173:5, 2174:5, 2174:8, 2175:3, 2176:12, 2176:13, 2178:12, 2179:16, 2180:23, 2181:20, 2185:12, 2186:14, 2199:11, 2200:23, 2201:5, 2201:8, 2201:9, 2201:20, 2202:24, 2203:6, 2203:11, 2204:16, 2205:2, 2205:11, 2207:21, 2214:23, 2219:25, 2221:2, 2221:3, 2221:25, 2222:1, 2222:5, 2222:11, 2222:12, 2222:16, 2223:17, 2225:1, 2225:2, 2225:21, 2226:1, 2226:6, 2226:13, 2226:17, 2226:18, 2226:23, 2226:24, 2227:3, 2236:14</p> <p>Patent [14] - 2136:7, 2136:12, 2137:14, 2178:11, 2214:25, 2215:2, 2215:7, 2222:19, 2222:23, 2223:3, 2223:6, 2223:7, 2224:12</p> <p>patent's [1] - 2230:21</p> <p>patentee [1] - 2239:10</p> <p>patents [32] - 2098:2, 2098:3, 2124:17, 2124:20, 2131:15, 2136:22, 2136:24, 2137:15, 2137:17, 2137:18, 2137:19, 2138:12, 2174:18, 2175:11, 2177:4, 2178:11, 2178:16, 2184:2, 2195:1, 2206:4, 2209:9, 2214:14, 2220:25, 2223:10, 2223:14, 2224:24, 2225:19, 2225:22, 2225:23, 2225:25, 2226:4, 2226:25</p> <p>patents-in-suit [7] - 2138:12, 2178:16, 2184:2, 2195:1, 2214:14, 2225:19, 2226:25</p> <p>pay [2] - 2101:14, 2228:25</p> <p>PC [5] - 2177:11, 2187:18, 2189:11, 2189:12, 2189:13</p> <p>PC...including [1] - 2181:16</p> <p>PCs [2] - 2182:6</p> <p>people [7] - 2176:10, 2176:12, 2208:14, 2209:5, 2218:3, 2218:6, 2228:11</p> <p>people's [2] - 2102:20, 2126:19</p> <p>per [4] - 2121:7, 2121:8, 2121:9, 2122:15</p> <p>percent [4] - 2238:6, 2239:13, 2239:14, 2239:20</p> <p>perfectly [1] - 2077:21</p> <p>perform [1] - 2235:4</p>	<p>performed [1] - 2158:8</p> <p>performs [1] - 2171:23</p> <p>perhaps [4] - 2104:11, 2113:9, 2114:2, 2150:16</p> <p>period [2] - 2177:13, 2177:22</p> <p>permeates [1] - 2235:23</p> <p>persistent [5] - 2129:5, 2129:13, 2145:24, 2146:6, 2186:18</p> <p>persistently [3] - 2130:18, 2186:17, 2186:23</p> <p>person [28] - 2175:19, 2176:2, 2176:7, 2176:8, 2176:16, 2183:12, 2184:22, 2184:25, 2186:2, 2186:9, 2192:1, 2192:2, 2192:4, 2193:24, 2193:25, 2199:1, 2199:7, 2199:9, 2201:2, 2201:3, 2203:14, 2206:8, 2206:12, 2207:20, 2220:2, 2220:5, 2220:14</p> <p>Personal [8] - 2136:22, 2188:8, 2225:2, 2233:9, 2234:5, 2237:16, 2240:8, 2240:18</p> <p>PERSONAL [1] - 2076:1</p> <p>personal [1] - 2228:1</p> <p>Personalized [2] - 2217:17, 2218:18</p> <p>personalized [1] - 2218:21</p> <p>perspective [1] - 2144:22</p> <p>phonograph [2] - 2208:9, 2208:22</p> <p>photograph [1] - 2214:9</p> <p>physical [1] - 2212:12</p> <p>pick [5] - 2077:6, 2193:10, 2208:12, 2219:5, 2231:18</p> <p>picked [2] - 2151:4, 2228:5</p> <p>picture [3] - 2137:6, 2151:8, 2227:2</p> <p>pictures [1] - 2149:20</p> <p>piece [4] - 2102:23, 2113:14, 2173:11, 2177:3</p> <p>pieces [6] - 2082:13, 2083:3, 2101:4, 2103:8, 2103:9, 2201:21</p> <p>pins [3] - 2116:17, 2116:18, 2116:21</p> <p>place [3] - 2119:11, 2143:16, 2213:6</p> <p>places [3] - 2098:20, 2143:14, 2143:18</p> <p>placing [2] - 2154:15, 2161:11</p> <p>plaintiff [2] - 2231:11, 2238:7</p> <p>plaintiff's [1] - 2237:5</p> <p>Plaintiff's [6] - 2085:1, 2093:14, 2099:7, 2119:12, 2141:10, 2223:16</p> <p>play [42] - 2082:16, 2082:17, 2082:18, 2082:24, 2084:7, 2084:10, 2090:23, 2091:3, 2093:25, 2094:3, 2094:7, 2094:21, 2094:25, 2095:8, 2117:11, 2143:10, 2144:8, 2147:22, 2147:23, 2147:24, 2148:3, 2148:6, 2153:6, 2153:7, 2154:24, 2155:1, 2159:8, 2189:1, 2191:14, 2191:16, 2192:15, 2192:16, 2192:22, 2193:11, 2195:22, 2197:3, 2208:24, 2217:1, 2217:5, 2217:6, 2217:7, 2236:9</p> <p>playable [1] - 2159:7</p> <p>playback [10] - 2088:14, 2140:23, 2140:25, 2143:11, 2161:13, 2164:25, 2165:24, 2191:15, 2202:1, 2202:16</p>
--	--	---

<p>playback_lookahead [1] - 2144:3</p> <p>played [15] - 2094:9, 2096:2, 2143:6, 2152:21, 2156:21, 2157:5, 2157:9, 2159:13, 2161:19, 2161:22, 2196:2, 2208:21, 2220:24, 2227:7, 2238:1</p> <p>player [49] - 2086:3, 2096:19, 2097:25, 2098:21, 2098:22, 2098:25, 2099:2, 2099:5, 2099:24, 2100:1, 2100:20, 2101:1, 2101:3, 2101:20, 2103:21, 2103:24, 2104:10, 2104:25, 2105:4, 2105:6, 2110:10, 2110:24, 2119:17, 2119:22, 2120:3, 2120:7, 2133:10, 2133:12, 2140:9, 2140:14, 2143:21, 2160:7, 2162:11, 2164:14, 2167:24, 2168:2, 2171:3, 2181:6, 2185:7, 2200:7, 2201:20, 2203:21, 2204:21, 2204:22, 2209:16, 2209:19, 2209:22, 2210:13</p> <p>players [7] - 2209:11, 2209:24, 2212:17, 2215:4, 2220:23, 2221:22</p> <p>playing [39] - 2082:19, 2082:20, 2091:10, 2143:11, 2144:7, 2146:22, 2153:25, 2157:1, 2157:19, 2157:20, 2157:23, 2157:24, 2159:19, 2160:11, 2160:14, 2161:14, 2166:5, 2166:14, 2166:19, 2166:20, 2166:24, 2168:14, 2174:4, 2188:16, 2188:25, 2190:16, 2191:15, 2193:7, 2195:6, 2195:10, 2195:17, 2195:22, 2196:4, 2196:6, 2202:20, 2210:16, 2211:2, 2215:11, 2216:13</p> <p>playlist [71] - 2082:19, 2083:14, 2084:7, 2093:20, 2094:7, 2094:8, 2094:21, 2095:18, 2095:24, 2096:2, 2096:20, 2096:23, 2097:15, 2097:22, 2127:6, 2127:23, 2127:24, 2128:3, 2143:11, 2144:13, 2145:5, 2147:25, 2148:4, 2152:13, 2152:22, 2153:1, 2153:8, 2153:15, 2154:15, 2157:8, 2157:9, 2157:10, 2158:18, 2159:4, 2159:12, 2161:11, 2161:17, 2161:21, 2163:9, 2163:12, 2182:12, 2186:22, 2188:17, 2188:25, 2189:1, 2191:5, 2191:16, 2191:19, 2192:20, 2192:21, 2194:23, 2195:23, 2196:22, 2196:25, 2200:9, 2200:11, 2200:12, 2208:17, 2208:19, 2215:25, 2216:22, 2216:23, 2218:20, 2219:6, 2222:11, 2225:2, 2226:23, 2226:24</p> <p>playlists [18] - 2082:15, 2083:10, 2083:17, 2094:23, 2143:5, 2143:12, 2143:16, 2143:18, 2145:2, 2182:15, 2186:21, 2208:5, 2208:25, 2216:21, 2219:18, 2227:5, 2237:22, 2237:24</p> <p>plays [6] - 2159:20, 2191:5, 2196:25, 2197:6, 2197:8, 2218:22</p> <p>plotting [1] - 2241:13</p> <p>plug [5] - 2107:8, 2107:9, 2107:20, 2108:5, 2123:21</p> <p>plugged [1] - 2107:12</p> <p>plugging [1] - 2108:9</p> <p>plurality [4] - 2099:17, 2099:21,</p>	<p>2164:21, 2232:22</p> <p>plus [8] - 2076:20, 2086:3, 2111:9, 2111:13, 2118:13, 2128:25, 2133:13, 2168:23</p> <p>Point [1] - 2226:9</p> <p>point [19] - 2076:21, 2080:17, 2114:14, 2123:11, 2164:16, 2165:20, 2167:21, 2184:24, 2196:22, 2208:4, 2217:7, 2224:11, 2226:11, 2231:8, 2240:12, 2240:15, 2240:19, 2241:16</p> <p>pointed [1] - 2078:15</p> <p>pointer [1] - 2081:18</p> <p>pointing [16] - 2156:6, 2172:7, 2174:9, 2188:3, 2194:18, 2196:24, 2197:7, 2211:19, 2211:23, 2212:6, 2212:8, 2212:10, 2212:20, 2212:21, 2215:15, 2215:16</p> <p>points [2] - 2077:18, 2230:8</p> <p>polled [1] - 2106:16</p> <p>popped [1] - 2148:10</p> <p>popular [2] - 2142:11, 2197:4</p> <p>popup [1] - 2163:14</p> <p>port [9] - 2141:13, 2141:25, 2142:2, 2165:1, 2181:22, 2186:17, 2202:8, 2230:22, 2230:24</p> <p>portable [2] - 2210:17, 2215:4</p> <p>portion [10] - 2092:7, 2097:20, 2099:13, 2157:5, 2161:3, 2166:12, 2203:1, 2203:8, 2204:7, 2218:15</p> <p>portions [3] - 2085:9, 2087:11, 2098:17</p> <p>ports [3] - 2182:6, 2182:7, 2182:8</p> <p>position [4] - 2152:19, 2152:22, 2153:10, 2191:11</p> <p>possible [2] - 2118:15, 2231:7</p> <p>possibly [1] - 2239:22</p> <p>power [2] - 2083:4, 2124:2</p> <p>powerful [1] - 2091:2</p> <p>precedes [4] - 2160:13, 2167:1, 2171:10, 2196:6</p> <p>predates [1] - 2208:1</p> <p>predetermined [1] - 2196:3</p> <p>predicate [2] - 2079:19, 2080:5</p> <p>preference [3] - 2163:25, 2199:24, 2227:18</p> <p>preferences [8] - 2162:19, 2162:23, 2191:14, 2200:4, 2218:20, 2219:5, 2219:9, 2222:16</p> <p>preferred [1] - 2234:23</p> <p>prefers [1] - 2227:14</p> <p>prepare [2] - 2148:20, 2148:25</p> <p>prepared [2] - 2149:10, 2149:15</p> <p>presence [1] - 2240:14</p> <p>present [23] - 2089:14, 2089:16, 2089:17, 2090:8, 2090:10, 2097:4, 2129:25, 2130:1, 2145:17, 2146:13, 2147:4, 2150:21, 2150:23, 2151:25, 2153:17, 2172:17, 2172:18, 2172:19, 2174:10, 2175:2, 2180:12, 2180:13</p> <p>PRESENT [2] - 2076:4, 2076:5</p> <p>presentation [2] - 2122:9, 2148:19</p>	<p>preserving [1] - 2231:14</p> <p>PRESIDING [1] - 2076:3</p> <p>press [4] - 2209:18, 2209:21, 2211:3, 2211:4</p> <p>pressing [1] - 2211:7</p> <p>pretty [4] - 2102:22, 2115:7, 2122:13, 2229:2</p> <p>previewed [2] - 2097:17, 2175:13</p> <p>previous [25] - 2093:8, 2151:20, 2153:9, 2160:23, 2166:23, 2167:1, 2171:11, 2174:9, 2192:12, 2196:1, 2196:25, 2199:21, 2202:4, 2203:8, 2204:25, 2205:22, 2205:24, 2209:8, 2209:19, 2213:8, 2216:6, 2216:10, 2216:11, 2216:14, 2219:1</p> <p>previously [1] - 2195:23</p> <p>price [1] - 2131:11</p> <p>primarily [1] - 2098:4</p> <p>primary [4] - 2131:8, 2136:4, 2172:5, 2180:6</p> <p>print [1] - 2198:2</p> <p>priorities [2] - 2230:17, 2230:19</p> <p>priority [1] - 2236:18</p> <p>problem [5] - 2078:8, 2123:1, 2123:7, 2123:9, 2123:12</p> <p>problems [1] - 2124:8</p> <p>procedure [1] - 2079:1</p> <p>proceedings [2] - 2080:13, 2218:16</p> <p>Proceedings [1] - 2241:17</p> <p>PROCEEDINGS [1] - 2241:21</p> <p>process [6] - 2083:7, 2085:4, 2091:2, 2172:5, 2235:5, 2239:8</p> <p>processed [1] - 2083:3</p> <p>processing [7] - 2083:5, 2101:10, 2112:22, 2116:12, 2173:18, 2173:22, 2205:10</p> <p>processor [13] - 2091:16, 2112:24, 2153:24, 2157:14, 2157:17, 2159:17, 2160:8, 2166:2, 2188:14, 2195:15, 2196:1, 2202:18, 2236:14</p> <p>processors [1] - 2151:17</p> <p>produced [2] - 2117:18, 2177:22</p> <p>producing [1] - 2173:17</p> <p>product [5] - 2082:2, 2088:8, 2106:3, 2111:18, 2224:13</p> <p>products [32] - 2081:22, 2083:22, 2084:21, 2084:23, 2085:25, 2089:14, 2090:14, 2096:6, 2097:10, 2097:12, 2097:14, 2106:6, 2110:12, 2110:24, 2129:9, 2130:15, 2130:17, 2130:22, 2134:8, 2134:10, 2136:18, 2136:19, 2190:5, 2190:14, 2191:6, 2212:24, 2235:1, 2236:24, 2237:4, 2237:16, 2237:17, 2237:20</p> <p>profile [1] - 2219:2</p> <p>profit [1] - 2238:7</p> <p>profits [1] - 2239:9</p> <p>program [63] - 2090:22, 2099:18, 2099:22, 2137:9, 2140:9, 2140:14, 2142:15, 2142:21, 2153:25, 2156:16,</p>
--	--	---

<p>2157:2, 2157:15, 2157:17, 2157:20, 2157:22, 2159:18, 2160:7, 2160:9, 2160:13, 2160:14, 2162:11, 2162:12, 2162:17, 2162:21, 2164:14, 2164:22, 2165:4, 2165:13, 2165:14, 2166:4, 2166:5, 2166:7, 2166:14, 2166:19, 2166:25, 2167:1, 2167:25, 2168:13, 2168:14, 2171:10, 2174:1, 2174:5, 2181:5, 2182:16, 2187:11, 2188:15, 2193:7, 2195:16, 2196:4, 2196:5, 2196:6, 2199:20, 2199:24, 2200:8, 2201:19, 2201:22, 2202:19, 2202:21, 2214:21, 2232:23, 2234:19</p> <p>ProgramID [4] - 2092:24, 2152:10, 2159:5, 2189:19</p> <p>programmed [4] - 2133:24, 2173:9, 2205:3, 2234:8</p> <p>programs [5] - 2103:10, 2119:25, 2120:1, 2133:25, 2173:10</p> <p>promise [1] - 2230:12</p> <p>proof [3] - 2164:11, 2173:11, 2237:6</p> <p>proper [1] - 2206:22</p> <p>proposition [1] - 2076:10</p> <p>proprietary [1] - 2117:12</p> <p>protocol [6] - 2184:2, 2184:8, 2184:10, 2184:13, 2185:6, 2232:6</p> <p>provided [3] - 2087:11, 2119:5, 2180:3</p> <p>provider [6] - 2101:16, 2101:19, 2102:7, 2102:10, 2103:6, 2104:8</p> <p>provides [3] - 2186:5, 2192:21, 2195:5</p> <p>providing [3] - 2102:9, 2157:1, 2214:21</p> <p>Publications [2] - 2223:18, 2223:21</p> <p>published [2] - 2178:5, 2218:6</p> <p>pull [6] - 2082:14, 2083:16, 2184:14, 2184:16, 2217:21, 2223:18</p> <p>pulls [1] - 2082:10</p> <p>punch [1] - 2216:9</p> <p>purchase [1] - 2117:19</p> <p>purpose [9] - 2081:25, 2150:4, 2150:9, 2160:21, 2171:22, 2189:3, 2189:9, 2189:12, 2234:8</p> <p>purposes [4] - 2130:21, 2138:22, 2231:10</p> <p>push [2] - 2216:12, 2216:13</p> <p>put [20] - 2083:3, 2084:11, 2094:24, 2102:12, 2114:16, 2127:24, 2133:1, 2137:2, 2184:19, 2184:20, 2189:10, 2208:11, 2220:2, 2220:6, 2220:8, 2220:10, 2221:10, 2228:12, 2234:5, 2240:3</p> <p>putting [2] - 2221:9, 2221:12</p>	<p>queue [1] - 2208:16</p> <p>quick [4] - 2095:15, 2176:19, 2215:19, 2226:5</p> <p>quickly [7] - 2118:10, 2127:23, 2128:2, 2128:4, 2154:20, 2203:20, 2216:5</p> <p>quite [5] - 2082:22, 2115:6, 2121:7, 2208:3, 2209:24</p> <p>quote [1] - 2214:22</p> <p>QWERTY [4] - 2126:14, 2126:17, 2127:5, 2127:7</p>	<p>2092:19, 2092:22, 2093:13, 2094:12, 2095:24, 2099:6, 2106:9, 2122:5, 2124:24, 2130:21, 2132:9, 2139:1, 2140:23, 2140:24, 2142:18, 2146:23, 2153:4, 2187:1, 2187:4, 2198:5, 2211:7, 2219:10, 2221:20, 2235:20, 2236:23, 2240:9, 2241:15</p> <p>records [2] - 2208:9, 2208:22</p> <p>rectangular [1] - 2101:2</p> <p>rectified [1] - 2076:24</p> <p>red [1] - 2081:14</p> <p>redact [1] - 2085:9</p> <p>redacted [2] - 2087:12, 2087:13</p> <p>redirect [1] - 2241:14</p> <p>reexam [1] - 2080:17</p> <p>reexamination [1] - 2080:13</p> <p>reference [24] - 2093:4, 2140:2, 2140:13, 2146:2, 2148:5, 2170:7, 2175:6, 2175:23, 2176:5, 2180:6, 2180:22, 2183:18, 2186:4, 2191:23, 2200:8, 2200:20, 2203:15, 2204:11, 2204:14, 2209:15, 2217:15, 2217:18, 2220:15</p> <p>referenced [1] - 2093:6</p> <p>references [15] - 2086:2, 2137:19, 2146:19, 2173:2, 2180:3, 2184:19, 2184:20, 2186:5, 2186:8, 2206:18, 2217:9, 2219:17, 2219:20, 2222:13, 2223:14</p> <p>referring [1] - 2146:24</p> <p>regard [34] - 2083:23, 2084:3, 2090:7, 2096:13, 2105:19, 2109:5, 2111:5, 2111:6, 2122:25, 2124:21, 2125:4, 2126:4, 2126:5, 2126:21, 2127:5, 2127:12, 2145:16, 2153:10, 2153:16, 2165:23, 2165:25, 2169:11, 2169:20, 2171:11, 2178:20, 2185:11, 2190:4, 2190:10, 2190:24, 2192:9, 2198:8, 2200:23, 2203:10, 2209:16</p> <p>regarding [23] - 2081:6, 2089:12, 2100:19, 2103:20, 2105:15, 2111:2, 2120:2, 2122:22, 2132:14, 2132:17, 2133:6, 2134:3, 2140:14, 2146:11, 2150:20, 2151:23, 2162:2, 2165:16, 2174:6, 2174:11, 2206:1, 2221:9, 2222:8</p> <p>regards [6] - 2152:24, 2155:5, 2178:11, 2178:25, 2193:19, 2215:23</p> <p>regular [3] - 2078:23, 2078:25, 2079:8</p> <p>relate [3] - 2197:12, 2200:14, 2206:17</p> <p>related [4] - 2144:13, 2225:9, 2234:21, 2236:11</p> <p>relates [4] - 2117:25, 2136:6, 2168:20, 2237:15</p> <p>relating [12] - 2119:8, 2130:14, 2151:24, 2171:14, 2190:20, 2200:23, 2203:11, 2204:9, 2214:11, 2215:22, 2223:9, 2234:7</p> <p>relationship [3] - 2104:1, 2123:18, 2124:13</p> <p>relatively [2] - 2145:7, 2230:2</p>
Q		
<p>qualify [1] - 2176:15</p> <p>quality [3] - 2140:21, 2140:24, 2181:17</p> <p>Quantization [1] - 2151:19</p> <p>quarter [3] - 2129:20, 2129:22, 2208:11</p> <p>questions [5] - 2136:4, 2148:13, 2224:19, 2227:25, 2229:7</p>	<p style="text-align: center;">R</p> <p>radio [1] - 2119:19</p> <p>raised [2] - 2076:7, 2231:14</p> <p>RAM [5] - 2082:14, 2083:4, 2093:24, 2129:5</p> <p>ran [3] - 2137:9, 2184:25, 2212:18</p> <p>random [1] - 2140:24</p> <p>range [2] - 2076:25, 2150:17</p> <p>rate [1] - 2239:6</p> <p>rather [5] - 2106:14, 2127:25, 2164:10, 2165:21, 2167:19</p> <p>re [2] - 2078:7, 2104:16</p> <p>re-take [1] - 2104:16</p> <p>reaches [1] - 2185:7</p> <p>reacquaint [1] - 2083:20</p> <p>read [13] - 2078:12, 2079:8, 2094:6, 2104:3, 2119:14, 2158:6, 2159:10, 2160:20, 2161:10, 2164:10, 2176:13, 2218:2</p> <p>reading [8] - 2092:9, 2098:23, 2119:16, 2129:4, 2156:25, 2184:3, 2213:15, 2228:25</p> <p>ready [2] - 2079:20, 2079:24</p> <p>real [6] - 2095:15, 2176:19, 2215:19, 2226:5, 2232:3, 2240:23</p> <p>realize [2] - 2080:3, 2220:3</p> <p>realized [1] - 2228:9</p> <p>realizing [1] - 2220:15</p> <p>really [7] - 2116:17, 2123:13, 2127:23, 2207:24, 2213:15, 2233:9, 2235:7</p> <p>reason [7] - 2127:24, 2131:8, 2137:16, 2194:17, 2210:18, 2226:8, 2232:3</p> <p>reasons [5] - 2115:23, 2125:8, 2132:1, 2132:15, 2132:20</p> <p>rebuttal [3] - 2229:22, 2230:3, 2241:9</p> <p>receive [1] - 2169:12</p> <p>receiving [15] - 2098:24, 2117:21, 2118:6, 2118:11, 2119:4, 2120:3, 2168:5, 2168:18, 2168:19, 2168:21, 2168:24, 2169:14, 2203:25, 2204:10, 2205:6</p> <p>recent [2] - 2077:11, 2231:13</p> <p>recess [2] - 2129:22, 2180:10</p> <p>Recess [2] - 2129:24, 2180:11</p> <p>recommend [1] - 2144:12</p> <p>RECORD [1] - 2241:21</p> <p>record [34] - 2078:12, 2078:13, 2078:20, 2078:25, 2079:7, 2091:25,</p>	

<p>release [2] - 2086:19, 2086:21</p> <p>releases [1] - 2086:17</p> <p>releasing [1] - 2086:23</p> <p>relied [1] - 2237:23</p> <p>rely [2] - 2085:5, 2085:11</p> <p>relying [1] - 2217:9</p> <p>remaining [6] - 2166:9, 2173:19, 2202:2, 2202:23, 2203:5, 2205:11</p> <p>remains [2] - 2084:6, 2198:14</p> <p>remarks [1] - 2087:18</p> <p>remember [4] - 2100:9, 2122:19, 2151:7, 2228:15</p> <p>remind [6] - 2089:21, 2155:11, 2168:19, 2179:16, 2192:18, 2207:10</p> <p>reminded [1] - 2077:12</p> <p>remote [3] - 2145:5, 2145:6, 2188:24</p> <p>removable [1] - 2169:16</p> <p>removed [1] - 2114:17</p> <p>removing [1] - 2142:8</p> <p>reopen [1] - 2076:24</p> <p>repeat [22] - 2094:25, 2095:5, 2095:6, 2095:13, 2095:18, 2095:23, 2095:25, 2096:1, 2096:17, 2096:22, 2189:2, 2216:19, 2217:1, 2217:7, 2222:8, 2222:10, 2236:12</p> <p>repeated [1] - 2105:1</p> <p>repeatedly [4] - 2209:19, 2209:22, 2211:3, 2211:5</p> <p>repeating [2] - 2189:1, 2216:21</p> <p>repeats [1] - 2188:24</p> <p>replace [1] - 2214:8</p> <p>replaceable [2] - 2129:6, 2169:5</p> <p>report [2] - 2080:14, 2148:22</p> <p>REPORTER'S [2] - 2076:1, 2241:18</p> <p>reproduce [1] - 2093:1</p> <p>reproduced [2] - 2187:13, 2187:19</p> <p>reproduces [4] - 2140:15, 2141:1, 2181:9, 2181:19</p> <p>Reproducing [1] - 2226:9</p> <p>reproducing [13] - 2091:15, 2112:15, 2133:24, 2141:6, 2141:7, 2165:24, 2167:25, 2168:8, 2173:9, 2187:10, 2202:16, 2204:4, 2221:14</p> <p>reproduction [14] - 2153:24, 2157:19, 2157:21, 2160:12, 2166:5, 2166:13, 2166:18, 2166:24, 2168:12, 2193:7, 2193:8, 2196:4, 2196:5, 2202:20</p> <p>request [34] - 2097:23, 2097:25, 2098:19, 2098:20, 2098:25, 2099:4, 2100:1, 2100:20, 2101:20, 2102:16, 2103:20, 2104:7, 2104:9, 2105:3, 2105:4, 2105:6, 2107:14, 2107:18, 2108:14, 2109:1, 2110:10, 2110:23, 2141:18, 2143:20, 2168:10, 2171:19, 2184:15, 2185:5, 2185:8, 2232:25, 2233:4</p> <p>requesting [2] - 2108:10, 2108:11</p> <p>requests [4] - 2098:22, 2099:2, 2110:9, 2162:19</p> <p>require [2] - 2097:19, 2182:20</p>	<p>required [8] - 2112:3, 2112:18, 2118:14, 2119:3, 2129:3, 2131:22, 2152:10, 2231:16</p> <p>requirement [2] - 2078:24, 2199:22</p> <p>requirements [4] - 2112:16, 2122:10, 2191:12, 2221:3</p> <p>Requirements [1] - 2078:11</p> <p>requires [13] - 2097:24, 2099:21, 2111:12, 2133:13, 2133:14, 2133:17, 2133:18, 2134:1, 2147:5, 2158:8, 2162:15, 2189:14, 2236:18</p> <p>research [3] - 2078:4, 2228:16, 2232:6</p> <p>resolution [1] - 2150:19</p> <p>resource [3] - 2180:7, 2183:24, 2194:1</p> <p>Resource [9] - 2183:21, 2185:2, 2185:14, 2186:8, 2186:10, 2191:24, 2193:20, 2200:24, 2206:9</p> <p>respect [26] - 2096:5, 2096:8, 2097:1, 2145:14, 2155:4, 2162:1, 2169:8, 2169:21, 2174:7, 2174:12, 2174:17, 2190:25, 2192:11, 2193:2, 2193:16, 2198:12, 2199:4, 2199:19, 2206:2, 2222:23, 2225:23, 2226:16, 2230:16, 2230:21, 2232:20, 2234:6</p> <p>respond [2] - 2086:17, 2104:11</p> <p>responds [6] - 2157:14, 2157:17, 2159:18, 2160:8, 2195:15, 2196:1</p> <p>response [2] - 2098:22, 2183:9</p> <p>responses [1] - 2085:5</p> <p>responsive [2] - 2171:6, 2173:22</p> <p>rest [7] - 2113:21, 2114:13, 2116:23, 2151:23, 2165:19, 2205:9, 2229:19</p> <p>result [1] - 2233:10</p> <p>retain [1] - 2191:18</p> <p>returning [1] - 2191:17</p> <p>review [1] - 2234:2</p> <p>reviewed [2] - 2078:4, 2138:8</p> <p>rewriting [1] - 2078:10</p> <p>RG-58 [1] - 2142:10</p> <p>right-hand [3] - 2131:18, 2136:14, 2161:13</p> <p>right-pointing [3] - 2211:23, 2212:10, 2212:21</p> <p>RON [1] - 2076:3</p> <p>room [3] - 2077:18, 2087:24, 2145:9</p> <p>rotate [2] - 2147:25, 2153:7</p> <p>roughly [3] - 2093:21, 2113:23, 2150:19</p> <p>routine [1] - 2172:2</p> <p>row [2] - 2212:7, 2212:9</p> <p>rows [1] - 2220:19</p> <p>royalty [1] - 2239:6</p> <p>RS-232 [1] - 2182:7</p> <p>Rule [3] - 2077:13, 2078:9, 2206:16</p> <p>rule [5] - 2076:23, 2077:2, 2079:10, 2231:10, 2239:22</p> <p>rules [2] - 2077:15, 2078:9</p> <p>ruling [2] - 2079:17, 2080:4</p> <p>run [2] - 2108:20, 2235:2</p> <p>running [13] - 2088:19, 2110:12,</p>	<p>2160:21, 2171:23, 2172:2, 2177:12, 2182:6, 2182:18, 2186:24, 2188:3, 2189:11, 2206:10, 2228:24</p> <p>runs [6] - 2095:10, 2106:21, 2138:13, 2182:5, 2183:18, 2200:19</p> <p style="text-align: center;">S</p> <p>safely [1] - 2240:24</p> <p>Sale [1] - 2226:10</p> <p>sale [1] - 2226:11</p> <p>sat [2] - 2077:16, 2149:20</p> <p>satellite [2] - 2102:3, 2102:4</p> <p>satisfied [1] - 2090:3</p> <p>save [1] - 2191:13</p> <p>saw [16] - 2124:11, 2141:5, 2142:5, 2144:20, 2146:8, 2146:21, 2147:7, 2154:10, 2156:10, 2156:19, 2157:6, 2159:9, 2164:1, 2164:2, 2214:5</p> <p>scan [3] - 2090:20, 2159:6, 2234:15</p> <p>scanning [12] - 2084:8, 2089:13, 2091:1, 2151:25, 2153:16, 2158:8, 2158:19, 2159:13, 2160:22, 2190:20, 2198:17, 2235:4</p> <p>schedule [1] - 2229:12</p> <p>SCHUTZ [6] - 2229:24, 2230:7, 2230:12, 2240:20, 2241:5, 2241:12</p> <p>scope [1] - 2183:13</p> <p>scrap [1] - 2231:17</p> <p>screen [22] - 2081:8, 2086:11, 2095:17, 2113:3, 2154:10, 2156:3, 2156:6, 2156:25, 2157:5, 2157:8, 2165:22, 2192:20, 2194:20, 2195:5, 2196:18, 2196:20, 2202:14, 2211:10, 2211:11, 2214:5, 2215:11, 2215:16</p> <p>screenings [1] - 2215:3</p> <p>screens [6] - 2194:24, 2214:20, 2215:8, 2216:18, 2222:2, 2222:4</p> <p>screenshot [1] - 2154:12</p> <p>script [1] - 2086:3</p> <p>scroll [8] - 2125:22, 2125:25, 2126:9, 2126:23, 2127:4, 2127:9, 2127:14, 2177:24</p> <p>scrollable [8] - 2156:4, 2156:6, 2194:20, 2194:23, 2194:24, 2214:21, 2222:3, 2222:5</p> <p>scrolling [2] - 2127:14, 2156:20</p> <p>search [2] - 2163:13, 2163:14</p> <p>searching [1] - 2084:9</p> <p>seat [1] - 2104:16</p> <p>second [26] - 2085:20, 2086:13, 2110:22, 2116:7, 2116:10, 2118:5, 2121:8, 2121:9, 2122:16, 2125:16, 2136:3, 2139:23, 2153:20, 2156:15, 2164:23, 2171:7, 2171:19, 2171:20, 2186:16, 2189:21, 2190:19, 2221:21, 2234:4, 2235:17, 2236:17</p> <p>section [9] - 2097:18, 2111:25, 2135:14, 2135:15, 2175:12, 2177:7, 2207:13, 2218:12, 2219:1</p>
--	--	--

<p>sections [2] - 2098:15, 2165:10</p> <p>see [81] - 2076:14, 2082:6, 2083:4, 2084:8, 2087:23, 2089:5, 2089:19, 2092:12, 2092:17, 2093:19, 2094:4, 2095:17, 2098:19, 2099:16, 2100:15, 2103:9, 2104:12, 2105:3, 2107:23, 2113:7, 2115:6, 2116:17, 2116:18, 2116:24, 2118:24, 2122:10, 2122:17, 2125:17, 2126:12, 2126:20, 2126:24, 2127:15, 2127:21, 2128:16, 2133:11, 2134:12, 2135:4, 2138:13, 2140:20, 2141:6, 2142:22, 2144:22, 2144:25, 2147:17, 2150:8, 2151:16, 2153:14, 2156:5, 2157:3, 2158:11, 2160:19, 2162:9, 2164:6, 2167:15, 2167:22, 2169:9, 2173:23, 2181:8, 2182:3, 2182:12, 2185:2, 2192:6, 2192:20, 2197:2, 2197:4, 2200:5, 2209:17, 2210:13, 2210:20, 2210:24, 2211:12, 2212:20, 2213:15, 2213:19, 2217:4, 2223:24, 2225:13, 2239:23, 2240:3, 2240:24</p> <p>seeing [2] - 2092:8, 2194:21</p> <p>seem [2] - 2124:7, 2229:12</p> <p>segment [8] - 2160:13, 2160:14, 2168:13, 2171:10, 2174:1, 2196:6, 2196:7, 2234:19</p> <p>segments [2] - 2167:25, 2181:12</p> <p>segue [1] - 2161:14</p> <p>select [3] - 2154:23, 2154:25, 2218:23</p> <p>selected [19] - 2156:16, 2162:18, 2163:8, 2165:3, 2166:4, 2166:6, 2167:25, 2192:11, 2193:5, 2193:9, 2193:10, 2199:23, 2200:3, 2200:11, 2202:9, 2202:19, 2202:21, 2202:22, 2216:2</p> <p>selecting [2] - 2154:18, 2156:21</p> <p>selection [10] - 2094:2, 2094:8, 2154:13, 2157:15, 2157:18, 2159:18, 2160:9, 2195:16, 2215:12, 2216:14</p> <p>Selection_Record [26] - 2091:7, 2091:9, 2091:11, 2091:20, 2091:21, 2092:10, 2092:18, 2092:20, 2092:23, 2092:25, 2096:5, 2096:7, 2096:18, 2097:14, 2152:4, 2152:8, 2152:12, 2152:21, 2158:10, 2158:15, 2158:17, 2160:23, 2234:16, 2235:5, 2236:21, 2236:23</p> <p>Selection_Records [3] - 2089:13, 2151:25, 2190:21</p> <p>selections [7] - 2092:9, 2162:13, 2162:22, 2199:25, 2200:8, 2209:20, 2209:22</p> <p>selector [2] - 2188:24, 2189:2</p> <p>sell [1] - 2114:24</p> <p>sending [2] - 2104:11, 2233:4</p> <p>sends [1] - 2092:25</p> <p>sense [4] - 2108:8, 2108:12, 2146:4, 2200:8</p> <p>senses [1] - 2127:19</p> <p>sent [1] - 2078:10</p>	<p>sentence [2] - 2216:4, 2233:15</p> <p>separate [13] - 2099:17, 2099:18, 2099:22, 2099:23, 2099:24, 2143:9, 2143:16, 2162:16, 2172:22, 2172:23, 2174:12, 2232:22, 2232:23</p> <p>separately [6] - 2079:16, 2114:24, 2164:25, 2170:2, 2202:1, 2202:7</p> <p>September [3] - 2138:17, 2178:5, 2178:22</p> <p>sequel [3] - 2084:2, 2084:5, 2088:17</p> <p>sequence [11] - 2091:21, 2119:5, 2144:21, 2165:25, 2168:22, 2168:25, 2205:7, 2213:5, 2213:7, 2216:6, 2216:11</p> <p>sequencing [17] - 2099:18, 2099:23, 2141:20, 2143:3, 2143:5, 2143:10, 2144:18, 2144:20, 2158:9, 2160:22, 2165:1, 2169:12, 2182:9, 2182:11, 2199:23, 2208:23, 2232:23</p> <p>sequestered [1] - 2230:2</p> <p>server [46] - 2097:20, 2097:23, 2097:25, 2099:10, 2099:19, 2100:21, 2101:24, 2102:17, 2102:21, 2103:6, 2103:8, 2103:14, 2103:17, 2103:21, 2103:24, 2104:1, 2104:8, 2104:10, 2104:11, 2105:1, 2105:7, 2106:21, 2110:11, 2110:24, 2119:18, 2119:23, 2119:24, 2120:8, 2120:21, 2144:24, 2145:3, 2145:6, 2145:8, 2162:17, 2162:18, 2184:12, 2184:14, 2184:15, 2184:16, 2185:8, 2185:9, 2200:3</p> <p>servers [2] - 2102:19, 2102:20</p> <p>service [5] - 2101:19, 2102:7, 2102:10, 2103:5, 2104:8</p> <p>session [1] - 2164:25</p> <p>set [6] - 2094:21, 2133:12, 2133:25, 2160:7, 2162:11, 2235:5</p> <p>sets [2] - 2078:10, 2197:22</p> <p>setting [6] - 2095:3, 2095:4, 2095:5, 2095:12, 2095:19, 2095:23</p> <p>settings [3] - 2095:1, 2095:6, 2191:13</p> <p>seven [2] - 2224:5, 2224:13</p> <p>several [7] - 2105:21, 2112:2, 2151:4, 2158:7, 2159:4, 2204:20, 2235:13</p> <p>shelf [1] - 2117:16</p> <p>short [3] - 2145:7, 2194:23, 2230:2</p> <p>shorter [1] - 2105:22</p> <p>Shoshana [1] - 2217:19</p> <p>show [15] - 2080:2, 2098:9, 2139:22, 2151:4, 2164:11, 2179:4, 2179:20, 2199:25, 2207:23, 2215:12, 2219:24, 2228:19, 2232:3, 2235:16, 2240:6</p> <p>showed [7] - 2136:18, 2151:8, 2157:9, 2159:3, 2173:11, 2174:20, 2175:8</p> <p>showing [6] - 2092:7, 2148:9, 2215:5, 2218:19, 2232:21, 2237:12</p> <p>shown [12] - 2078:6, 2090:7, 2090:12, 2097:3, 2104:5, 2139:8, 2140:19, 2167:9, 2186:22, 2218:18, 2220:1, 2234:22</p> <p>shows [10] - 2120:12, 2128:14,</p>	<p>2128:16, 2143:12, 2143:16, 2152:4, 2152:6, 2195:9, 2217:22, 2220:11</p> <p>shuffle [1] - 2084:11</p> <p>side [13] - 2076:24, 2113:3, 2125:17, 2131:18, 2131:19, 2136:14, 2138:2, 2156:8, 2161:13, 2177:17, 2212:7, 2233:21, 2240:21</p> <p>sides [1] - 2229:4</p> <p>signal [8] - 2106:24, 2107:4, 2107:11, 2107:19, 2108:6, 2108:14, 2233:5</p> <p>signals [1] - 2102:1</p> <p>significant [1] - 2132:3</p> <p>similar [6] - 2167:15, 2178:19, 2179:2, 2195:19, 2211:9, 2236:16</p> <p>similarities [2] - 2126:11</p> <p>simple [3] - 2104:24, 2215:2, 2221:15</p> <p>simply [22] - 2084:10, 2090:22, 2091:2, 2091:3, 2094:22, 2096:7, 2096:12, 2099:3, 2107:16, 2107:21, 2108:12, 2108:15, 2125:6, 2132:24, 2167:21, 2190:9, 2197:2, 2201:23, 2224:5, 2225:13, 2233:5, 2233:16</p> <p>single [19] - 2078:5, 2128:1, 2139:20, 2139:21, 2140:6, 2155:14, 2167:9, 2170:7, 2171:6, 2174:19, 2174:25, 2175:6, 2175:8, 2175:17, 2231:7, 2231:8, 2231:16</p> <p>sit [1] - 2116:3</p> <p>site [2] - 2103:14, 2184:5</p> <p>Site [1] - 2237:9</p> <p>sits [2] - 2089:7, 2115:25</p> <p>sitting [3] - 2102:24, 2141:5, 2196:19</p> <p>six [1] - 2126:14</p> <p>sixth [2] - 2090:2, 2090:9</p> <p>size [9] - 2113:23, 2113:25, 2114:1, 2114:6, 2115:2, 2116:6, 2121:15, 2126:4</p> <p>skill [26] - 2121:21, 2175:19, 2176:2, 2176:7, 2176:16, 2183:12, 2184:22, 2184:25, 2186:2, 2186:9, 2192:1, 2193:21, 2193:24, 2193:25, 2198:11, 2199:2, 2199:8, 2199:9, 2201:2, 2201:3, 2203:14, 2206:8, 2206:12, 2207:20, 2220:2, 2220:5</p> <p>skip [82] - 2154:1, 2157:15, 2157:17, 2158:25, 2159:1, 2159:18, 2160:9, 2160:13, 2161:16, 2161:20, 2164:23, 2166:15, 2166:21, 2166:23, 2167:1, 2168:10, 2168:14, 2171:7, 2171:11, 2171:19, 2174:2, 2174:3, 2192:11, 2193:5, 2193:10, 2195:15, 2195:16, 2195:19, 2195:20, 2195:25, 2196:1, 2197:10, 2197:15, 2202:22, 2203:1, 2203:3, 2203:8, 2204:7, 2204:23, 2204:25, 2205:16, 2205:17, 2205:22, 2205:24, 2209:7, 2209:8, 2210:19, 2210:20, 2210:22, 2211:1, 2211:4, 2211:5, 2211:8, 2211:20, 2211:24, 2212:6, 2212:9, 2212:13, 2212:21, 2212:22, 2212:24, 2212:25, 2213:3, 2213:5, 2214:11, 2215:22, 2216:3,</p>
--	---	---

<p>2216:8, 2221:21, 2221:24, 2235:2, 2235:4, 2236:2, 2236:3, 2236:4</p> <p>skipping [14] - 2083:24, 2159:16, 2159:17, 2161:1, 2192:11, 2196:9, 2196:13, 2197:12, 2198:12, 2209:13, 2216:1, 2234:9</p> <p>skips [1] - 2209:20</p> <p>slide [49] - 2081:8, 2081:10, 2093:8, 2104:22, 2120:11, 2128:17, 2136:2, 2136:3, 2137:2, 2142:14, 2149:7, 2149:15, 2151:1, 2151:20, 2152:3, 2152:17, 2153:9, 2158:24, 2161:4, 2163:4, 2170:24, 2173:7, 2173:21, 2181:7, 2182:2, 2183:16, 2186:15, 2187:8, 2187:16, 2187:24, 2188:23, 2192:18, 2195:14, 2195:25, 2196:16, 2197:18, 2199:21, 2200:6, 2201:13, 2202:13, 2203:19, 2204:18, 2205:15, 2207:18, 2207:25, 2209:12, 2214:19, 2216:20, 2224:23</p> <p>slides [20] - 2088:3, 2093:11, 2114:11, 2116:15, 2141:10, 2148:9, 2148:11, 2148:15, 2148:20, 2148:25, 2149:2, 2149:11, 2178:8, 2178:22, 2206:16, 2206:25, 2214:2, 2218:9, 2224:16, 2237:22</p> <p>slight [2] - 2084:1, 2235:24</p> <p>slightly [1] - 2081:25</p> <p>slot [2] - 2116:15, 2161:13</p> <p>slower [1] - 2122:16</p> <p>slowly [3] - 2082:11, 2083:2, 2208:18</p> <p>small [4] - 2102:11, 2115:16, 2150:10, 2194:22</p> <p>smaller [1] - 2114:6</p> <p>snap [1] - 2227:23</p> <p>socket [3] - 2114:11, 2114:16</p> <p>sockets [1] - 2116:21</p> <p>software [18] - 2081:6, 2082:12, 2083:20, 2086:21, 2086:22, 2097:13, 2108:20, 2111:5, 2147:11, 2169:4, 2172:2, 2177:1, 2190:20, 2191:1, 2192:10, 2198:18, 2212:17, 2237:3</p> <p>sold [1] - 2117:9</p> <p>soldered [1] - 2114:15</p> <p>someone [11] - 2078:14, 2078:20, 2078:21, 2081:18, 2121:20, 2123:4, 2131:6, 2136:10, 2149:15, 2149:20, 2228:17</p> <p>something's [1] - 2107:11</p> <p>sometime [1] - 2241:3</p> <p>sometimes [4] - 2105:22, 2114:16, 2115:3, 2137:19</p> <p>somewhere [2] - 2183:9, 2183:13</p> <p>song [13] - 2095:7, 2095:25, 2096:22, 2154:21, 2154:23, 2154:25, 2157:25, 2159:4, 2192:12, 2208:12, 2208:18, 2209:8, 2235:1</p> <p>songs [11] - 2083:24, 2093:22, 2127:25, 2163:11, 2163:17, 2192:22, 2192:25, 2218:22, 2218:24, 2219:2, 2219:6</p>	<p>soon [1] - 2080:1</p> <p>sorry [14] - 2092:14, 2109:14, 2129:13, 2139:6, 2146:25, 2157:13, 2176:20, 2202:5, 2210:23, 2211:16, 2214:3, 2215:16, 2230:23, 2231:2</p> <p>sort [23] - 2081:9, 2095:24, 2100:18, 2104:22, 2105:16, 2107:1, 2113:6, 2113:23, 2117:15, 2120:11, 2132:13, 2134:20, 2134:25, 2135:13, 2136:5, 2139:15, 2153:20, 2161:23, 2164:7, 2176:7, 2207:14, 2215:8, 2220:18</p> <p>Sound [109] - 2137:8, 2175:14, 2175:15, 2175:16, 2175:17, 2175:21, 2175:24, 2176:3, 2176:18, 2176:25, 2177:11, 2178:10, 2178:15, 2178:23, 2179:2, 2179:5, 2179:6, 2179:14, 2179:18, 2179:21, 2180:4, 2180:19, 2181:1, 2181:4, 2181:8, 2181:13, 2181:15, 2181:18, 2181:23, 2182:5, 2182:13, 2182:15, 2182:16, 2182:18, 2182:19, 2182:23, 2183:1, 2183:3, 2183:6, 2183:14, 2183:18, 2184:24, 2185:1, 2185:13, 2185:23, 2186:8, 2186:11, 2186:19, 2186:20, 2186:24, 2186:25, 2187:6, 2187:14, 2188:4, 2188:8, 2188:20, 2189:4, 2189:10, 2189:17, 2189:25, 2190:4, 2190:10, 2190:11, 2190:24, 2191:1, 2191:4, 2191:5, 2191:8, 2191:17, 2192:14, 2192:15, 2192:16, 2192:21, 2193:3, 2193:19, 2193:22, 2194:13, 2194:15, 2196:12, 2196:17, 2197:16, 2198:24, 2199:5, 2200:7, 2200:11, 2200:16, 2200:18, 2200:19, 2200:24, 2200:25, 2201:4, 2203:11, 2203:14, 2204:10, 2206:1, 2206:2, 2206:7, 2206:8, 2206:18, 2212:15, 2219:21, 2220:3, 2220:9, 2220:11</p> <p>sound [40] - 2112:16, 2112:17, 2112:18, 2113:4, 2113:15, 2113:19, 2113:24, 2115:2, 2115:11, 2116:13, 2117:8, 2117:10, 2117:11, 2117:14, 2117:15, 2137:9, 2140:15, 2141:2, 2141:6, 2141:7, 2150:4, 2150:5, 2150:16, 2150:20, 2150:21, 2150:23, 2151:3, 2151:8, 2151:22, 2177:1, 2177:2, 2181:9, 2181:15, 2181:16, 2181:19, 2187:18, 2189:3, 2189:4</p> <p>sounds [1] - 2173:17</p> <p>source [5] - 2084:16, 2084:20, 2086:2, 2207:3</p> <p>speaker [2] - 2187:10, 2187:11</p> <p>speakers [2] - 2113:9, 2146:21</p> <p>special [2] - 2079:14, 2108:20</p> <p>specific [12] - 2098:11, 2099:9, 2160:21, 2171:16, 2211:17, 2220:21, 2221:2, 2221:6, 2232:16, 2233:3, 2236:7</p> <p>specifically [6] - 2150:16, 2182:8, 2218:23, 2222:14, 2236:18, 2237:19</p> <p>specification [2] - 2105:15, 2105:16</p>	<p>specifics [1] - 2220:17</p> <p>specified [1] - 2199:23</p> <p>speed [7] - 2121:5, 2121:23, 2123:13, 2124:8, 2129:5, 2129:12, 2169:3</p> <p>spin [2] - 2082:23, 2083:1</p> <p>spins [1] - 2082:10</p> <p>spirit [1] - 2076:22</p> <p>SQL [1] - 2088:17</p> <p>stand [1] - 2079:18</p> <p>standard [10] - 2106:1, 2106:3, 2106:8, 2106:15, 2108:4, 2118:20, 2126:17, 2127:5, 2140:24, 2182:6</p> <p>standardized [3] - 2114:11, 2116:21, 2212:23</p> <p>standards [2] - 2105:20, 2106:5</p> <p>standby [2] - 2144:12, 2144:13</p> <p>standing [1] - 2240:13</p> <p>stands [1] - 2115:17</p> <p>start [32] - 2077:1, 2079:20, 2084:10, 2085:21, 2091:23, 2094:9, 2095:7, 2095:21, 2096:16, 2101:4, 2101:5, 2129:15, 2133:9, 2135:9, 2140:8, 2157:25, 2167:24, 2176:18, 2191:14, 2192:25, 2193:11, 2194:10, 2221:21, 2227:13, 2227:15, 2228:22, 2228:24, 2229:4, 2229:8, 2229:12, 2231:22, 2232:16</p> <p>start-up [1] - 2085:21</p> <p>started [1] - 2122:21</p> <p>starting [4] - 2139:16, 2141:24, 2216:23, 2229:17</p> <p>starts [3] - 2106:20, 2181:5, 2185:6</p> <p>state [1] - 2130:22</p> <p>statement [2] - 2128:24, 2181:13</p> <p>stay [1] - 2152:25</p> <p>step [6] - 2100:7, 2109:19, 2229:15, 2234:15, 2234:19, 2236:5</p> <p>STEPHEN [1] - 2081:1</p> <p>steps [4] - 2083:21, 2089:13, 2171:24, 2236:19</p> <p>stereo [3] - 2140:22, 2146:19, 2196:19</p> <p>stick [1] - 2117:3</p> <p>stickers [1] - 2128:7</p> <p>still [12] - 2101:17, 2103:23, 2103:25, 2104:21, 2145:12, 2197:4, 2198:23, 2199:1, 2208:15, 2213:19, 2239:8</p> <p>stop [15] - 2093:1, 2094:3, 2094:10, 2094:25, 2095:10, 2148:4, 2157:24, 2160:11, 2189:21, 2190:19, 2191:14, 2191:15, 2195:21, 2228:25</p> <p>stopping [1] - 2195:16</p> <p>stops [2] - 2157:20, 2159:19</p> <p>storage [10] - 2122:12, 2129:4, 2129:5, 2129:13, 2145:25, 2146:7, 2169:16, 2173:13, 2186:18, 2205:6</p> <p>Storage [1] - 2226:2</p> <p>store [7] - 2095:24, 2104:13, 2130:18, 2131:10, 2169:12, 2186:21</p> <p>stored [13] - 2081:12, 2081:20, 2081:21, 2081:23, 2082:2, 2088:12,</p>
---	--	---

<p>2140:22, 2143:13, 2143:18, 2144:15, 2164:25, 2186:23, 2202:1</p> <p>stores [1] - 2088:24</p> <p>storing [17] - 2119:4, 2128:14, 2128:19, 2128:21, 2130:13, 2164:21, 2168:4, 2168:5, 2168:20, 2168:21, 2168:24, 2169:14, 2186:18, 2202:8, 2203:24, 2205:7, 2208:25</p> <p>string [1] - 2163:16</p> <p>strong [1] - 2126:11</p> <p>structural [8] - 2109:9, 2111:10, 2111:13, 2111:15, 2112:2, 2112:16, 2237:11, 2237:12</p> <p>structurally [5] - 2115:20, 2118:22, 2120:15, 2126:24, 2132:4</p> <p>structure [29] - 2097:5, 2097:6, 2111:11, 2111:12, 2116:1, 2119:3, 2129:2, 2129:3, 2131:25, 2148:7, 2149:25, 2150:3, 2151:24, 2152:6, 2152:7, 2152:9, 2152:15, 2158:15, 2161:4, 2169:1, 2169:10, 2169:11, 2169:14, 2169:18, 2171:22, 2198:15, 2234:9, 2235:16</p> <p>structures [26] - 2112:3, 2112:19, 2118:15, 2118:16, 2125:21, 2131:15, 2131:17, 2131:18, 2131:19, 2131:21, 2152:14, 2159:24, 2159:25, 2171:21, 2172:9, 2173:16, 2189:15, 2189:18, 2197:15, 2197:17, 2198:8, 2198:9, 2198:20, 2234:24, 2235:9</p> <p>studied [1] - 2077:7</p> <p>study [1] - 2106:2</p> <p>stuff [8] - 2103:11, 2117:10, 2119:21, 2127:9, 2133:14, 2163:10, 2183:22, 2220:5</p> <p>subject [1] - 2090:21</p> <p>submitted [1] - 2162:19</p> <p>subscriber's [1] - 2119:20</p> <p>substantial [12] - 2090:17, 2090:18, 2091:4, 2096:14, 2102:13, 2110:14, 2110:15, 2121:12, 2121:14, 2124:7, 2124:10, 2127:4</p> <p>substantially [5] - 2078:6, 2096:23, 2111:19, 2125:8, 2132:2</p> <p>substantive [1] - 2085:8</p> <p>substitute [5] - 2121:22, 2122:23, 2122:25, 2131:7, 2132:7</p> <p>substitutes [1] - 2132:8</p> <p>succession [4] - 2147:23, 2153:6, 2188:15, 2188:16</p> <p>suddenly [1] - 2228:9</p> <p>sufficiency [1] - 2232:20</p> <p>sufficient [2] - 2078:6, 2234:5</p> <p>suggest [1] - 2144:14</p> <p>suggested [2] - 2115:15, 2115:20</p> <p>suggestion [2] - 2118:21, 2239:19</p> <p>suit [8] - 2138:12, 2178:16, 2184:2, 2195:1, 2214:14, 2225:19, 2225:25, 2226:25</p> <p>summarize [6] - 2089:4, 2104:23, 2107:2, 2125:3, 2131:16, 2132:13</p>	<p>summarized [1] - 2207:3</p> <p>summary [6] - 2104:24, 2206:16, 2206:23, 2206:25, 2207:1, 2207:2</p> <p>sums [1] - 2125:6</p> <p>support [10] - 2161:1, 2162:25, 2181:23, 2188:20, 2189:8, 2194:14, 2196:12, 2234:6, 2238:6, 2240:4</p> <p>suppose [1] - 2127:24</p> <p>sustain [1] - 2079:11</p> <p>swap [2] - 2117:4, 2122:1</p> <p>switch [1] - 2084:25</p> <p>switches [1] - 2114:22</p> <p>synchronized [1] - 2088:20</p> <p>synchronizing [2] - 2123:21, 2123:23</p> <p>System [3] - 2206:10, 2218:18, 2226:8</p> <p>system [57] - 2119:17, 2129:4, 2137:3, 2138:4, 2138:15, 2139:16, 2139:19, 2140:2, 2141:4, 2143:8, 2143:15, 2144:19, 2145:5, 2145:6, 2145:18, 2146:8, 2146:9, 2146:13, 2146:20, 2147:4, 2150:22, 2152:1, 2153:18, 2154:7, 2154:8, 2154:11, 2155:8, 2156:9, 2156:12, 2157:6, 2158:23, 2162:5, 2164:1, 2164:2, 2164:3, 2167:11, 2169:24, 2170:1, 2170:5, 2170:8, 2170:9, 2170:14, 2172:19, 2172:25, 2174:11, 2174:12, 2174:14, 2174:23, 2175:1, 2175:7, 2181:18, 2206:19, 2218:24, 2219:21, 2220:9, 2226:3</p> <p>system...selects [1] - 2218:22</p> <p>Systems [1] - 2226:1</p> <p>systems [7] - 2123:1, 2123:2, 2123:7, 2137:22, 2142:6, 2221:15</p>	<p>2149:16, 2149:17, 2190:13, 2229:3, 2235:7</p> <p>TEXAS [1] - 2076:3</p> <p>text [7] - 2103:10, 2106:12, 2154:13, 2161:10, 2165:14, 2201:23, 2202:14</p> <p>THAT [1] - 2241:19</p> <p>THE [101] - 2076:6, 2076:16, 2077:14, 2078:2, 2079:23, 2080:1, 2080:7, 2080:8, 2080:10, 2080:16, 2080:18, 2080:20, 2085:14, 2086:25, 2087:4, 2087:6, 2087:9, 2087:15, 2100:9, 2100:11, 2104:17, 2104:18, 2109:18, 2129:17, 2129:22, 2130:2, 2130:6, 2130:8, 2130:21, 2131:1, 2131:2, 2131:4, 2135:19, 2135:21, 2135:23, 2138:25, 2148:13, 2148:24, 2149:1, 2149:2, 2149:4, 2149:9, 2179:22, 2180:2, 2180:9, 2180:14, 2197:18, 2197:21, 2197:25, 2198:4, 2206:20, 2207:5, 2207:9, 2210:7, 2213:18, 2213:21, 2214:6, 2227:12, 2227:16, 2227:22, 2227:25, 2229:15, 2229:16, 2229:17, 2229:21, 2230:4, 2230:10, 2230:14, 2230:23, 2231:1, 2232:13, 2232:17, 2233:2, 2233:7, 2233:12, 2233:18, 2233:25, 2234:21, 2235:10, 2235:20, 2236:1, 2236:6, 2236:24, 2237:7, 2237:13, 2237:19, 2238:3, 2238:11, 2238:17, 2238:21, 2239:12, 2239:18, 2239:21, 2239:24, 2240:1, 2240:11, 2240:18, 2240:23, 2241:15, 2241:20</p> <p>thereabouts [1] - 2239:11</p> <p>thesis [8] - 2078:5, 2078:16, 2079:5, 2079:7, 2079:16, 2080:6</p> <p>they've [1] - 2237:25</p> <p>thick [1] - 2204:14</p> <p>thinking [1] - 2241:13</p> <p>third [6] - 2078:24, 2095:19, 2125:14, 2187:9, 2236:10, 2237:23</p> <p>THIS [1] - 2241:19</p> <p>thousand [1] - 2121:18</p> <p>thousands [1] - 2218:2</p> <p>three [10] - 2096:3, 2100:25, 2122:18, 2163:17, 2173:14, 2192:22, 2201:21, 2234:15, 2234:19, 2236:5</p> <p>three-step [3] - 2234:15, 2234:19, 2236:5</p> <p>throughout [5] - 2085:24, 2117:22, 2154:4, 2179:8, 2234:12</p> <p>thumb [1] - 2126:9</p> <p>timed [1] - 2159:11</p> <p>timeline [1] - 2138:13</p> <p>timing [1] - 2138:11</p> <p>title [1] - 2163:18</p> <p>today [9] - 2101:14, 2132:14, 2132:16, 2148:20, 2214:13, 2223:2, 2224:4, 2225:25, 2227:21</p> <p>together [12] - 2082:15, 2114:24, 2142:6, 2172:21, 2184:20, 2184:21, 2220:2, 2220:6, 2220:8, 2221:10,</p>
T		
<p>talks [13] - 2085:21, 2086:13, 2099:1, 2101:13, 2119:15, 2120:9, 2146:18, 2148:5, 2161:4, 2184:4, 2209:13, 2220:20, 2238:11</p> <p>tape [1] - 2140:22</p> <p>technical [1] - 2176:11</p> <p>technically [2] - 2225:1, 2231:7</p> <p>technologies [5] - 2103:19, 2122:17, 2214:12, 2214:17, 2221:19</p> <p>technology [9] - 2104:8, 2105:18, 2105:19, 2105:24, 2124:16, 2214:15, 2225:14, 2225:18, 2226:19</p> <p>telephone [2] - 2101:17, 2101:19</p> <p>ten [1] - 2121:17</p> <p>term [2] - 2076:20, 2235:11</p> <p>terminal [2] - 2184:11, 2185:7</p> <p>terms [4] - 2175:3, 2220:21, 2225:9, 2232:13</p> <p>terribly [1] - 2113:8</p> <p>testified [1] - 2124:14</p> <p>testify [2] - 2229:25, 2230:1</p> <p>testifying [1] - 2148:11</p> <p>testimony [7] - 2084:13, 2106:23,</p>		

<p>2221:11, 2221:12 toggling ^[1] - 2161:17 Tony ^[1] - 2122:9 took ^[2] - 2148:22, 2193:23 tool ^[1] - 2192:5 top ^[26] - 2076:13, 2076:18, 2077:9, 2077:20, 2077:24, 2084:10, 2091:11, 2091:23, 2092:21, 2092:25, 2093:7, 2094:14, 2095:21, 2096:16, 2101:23, 2137:1, 2147:25, 2153:8, 2167:24, 2177:5, 2177:7, 2212:7, 2212:9, 2232:2, 2232:3, 2232:11 topic ^[1] - 2090:21 total ^[1] - 2241:11 touch ^[4] - 2086:20, 2122:22, 2126:6, 2143:10 touched ^[1] - 2192:18 touching ^[2] - 2154:16, 2161:12 touchscreen ^[1] - 2172:7 trace ^[2] - 2134:25, 2135:4 track ^[5] - 2083:10, 2188:25, 2197:6, 2197:8, 2215:5 TRANSCRIPT ^[1] - 2241:20 transcript ^[1] - 2233:22 transfer ^[11] - 2100:2, 2105:5, 2107:14, 2108:7, 2108:10, 2108:11, 2184:2, 2184:9, 2184:12, 2185:6, 2233:1 transferring ^[1] - 2099:21 transfers ^[1] - 2106:19 translating ^[2] - 2112:22, 2173:18 translation ^[3] - 2112:15, 2173:24, 2173:25 transport ^[1] - 2085:22 treat ^[1] - 2179:11 treated ^[1] - 2170:10 trial ^[2] - 2230:3, 2231:9 TRIAL ^[1] - 2076:2 triangle ^[2] - 2196:24, 2197:7 triangles ^[6] - 2211:19, 2211:24, 2212:8, 2212:11, 2212:21, 2212:22 tries ^[1] - 2082:25 true ^[1] - 2127:2 truly ^[1] - 2239:4 try ^[1] - 2082:25 trying ^[3] - 2087:22, 2123:4, 2123:10 Tuesday ^[8] - 2227:13, 2227:15, 2229:13, 2229:18, 2240:7, 2240:25, 2241:1, 2241:8 turn ^[2] - 2082:10, 2094:17 turned ^[3] - 2082:6, 2102:25, 2138:19 turning ^[2] - 2083:24, 2143:7 turns ^[1] - 2150:16 TV ^[1] - 2123:10 twice ^[1] - 2216:9 two ^[41] - 2076:22, 2077:5, 2077:16, 2078:17, 2118:17, 2120:18, 2121:11, 2121:22, 2125:8, 2136:25, 2137:15, 2137:20, 2142:6, 2143:18, 2152:8, 2152:10, 2170:10, 2171:24, 2172:24, 2178:11, 2184:19, 2184:20, 2185:15,</p>	<p>2185:21, 2186:5, 2186:8, 2197:22, 2199:19, 2211:19, 2211:23, 2212:7, 2212:10, 2212:20, 2212:21, 2223:14, 2224:8, 2225:5, 2225:16, 2238:8, 2239:17, 2241:11 tying ^[1] - 2119:3 type ^[9] - 2090:20, 2103:1, 2103:23, 2125:25, 2134:4, 2152:11, 2159:2, 2161:8, 2185:8 types ^[3] - 2103:15, 2199:13, 2212:13 typical ^[1] - 2142:12 typically ^[1] - 2117:9 typing ^[2] - 2126:18, 2147:9</p> <p style="text-align: center;">U</p> <p>un-networked ^[1] - 2142:7 uncontested ^[10] - 2168:7, 2168:10, 2173:14, 2201:23, 2202:11, 2203:24, 2204:3, 2204:6, 2204:21, 2205:9 under ^[16] - 2078:8, 2089:17, 2089:18, 2089:24, 2090:16, 2092:21, 2094:1, 2096:9, 2110:4, 2126:12, 2131:24, 2165:2, 2176:15, 2223:18, 2223:20, 2230:20 underlay ^[1] - 2098:18 underneath ^[1] - 2156:11 understandable ^[1] - 2201:2 understood ^[1] - 2176:13 unfolded ^[1] - 2083:2 unfortunately ^[2] - 2101:6, 2111:16 Uniloc ^[1] - 2239:4 unit ^[8] - 2101:10, 2145:20, 2146:16, 2164:21, 2165:24, 2186:16, 2187:9, 2201:22 units ^[1] - 2083:5 unless ^[6] - 2079:8, 2082:23, 2083:1, 2084:10, 2227:17, 2235:1 unnumbered ^[1] - 2224:2 unpack ^[1] - 2119:21 unworkable ^[1] - 2149:21 up ^[78] - 2076:9, 2079:23, 2080:2, 2080:14, 2081:5, 2081:8, 2082:5, 2085:15, 2085:21, 2086:11, 2089:2, 2090:5, 2092:11, 2094:19, 2095:15, 2098:2, 2098:9, 2100:10, 2101:22, 2103:17, 2107:6, 2107:7, 2108:16, 2108:21, 2109:19, 2113:2, 2114:9, 2116:6, 2116:24, 2120:11, 2120:20, 2120:24, 2121:25, 2122:8, 2122:15, 2123:22, 2123:24, 2125:6, 2128:15, 2128:16, 2136:11, 2136:25, 2142:9, 2148:10, 2149:8, 2149:9, 2157:16, 2158:11, 2163:10, 2163:11, 2163:18, 2164:6, 2165:21, 2173:7, 2177:5, 2189:22, 2203:19, 2207:6, 2213:20, 2217:2, 2217:21, 2222:7, 2223:18, 2224:17, 2226:5, 2227:21, 2228:5, 2228:18, 2229:4, 2229:8, 2230:6, 2230:8, 2231:4, 2231:19, 2236:20,</p>	<p>2240:14 upable ^[1] - 2092:12 update ^[1] - 2234:17 upper ^[1] - 2126:15 USB ^[28] - 2105:8, 2105:12, 2105:15, 2105:16, 2105:18, 2106:1, 2106:8, 2106:15, 2106:16, 2107:8, 2107:23, 2108:1, 2108:4, 2118:21, 2118:25, 2119:2, 2120:15, 2120:16, 2120:20, 2120:23, 2123:19, 2123:22, 2125:4, 2125:7, 2233:3, 2233:13 user ^[15] - 2094:1, 2094:7, 2094:16, 2095:1, 2096:1, 2163:9, 2172:6, 2175:23, 2176:25, 2191:16, 2200:9, 2200:11, 2219:5, 2219:7, 2221:15 user's ^[6] - 2094:1, 2163:24, 2163:25, 2177:7, 2177:9, 2177:10 uses ^[1] - 2218:24</p> <p style="text-align: center;">V</p> <p>valid ^[1] - 2136:24 value ^[1] - 2239:3 variable ^[7] - 2152:19, 2152:25, 2153:11, 2190:22, 2191:20, 2191:22, 2192:7 variations ^[1] - 2235:24 variety ^[2] - 2163:17, 2215:12 various ^[6] - 2102:20, 2164:12, 2209:5, 2212:17, 2216:25, 2234:22 vary ^[2] - 2097:13, 2113:25 verified ^[1] - 2151:20 version ^[5] - 2087:13, 2177:13, 2178:2, 2178:4 versions ^[3] - 2138:16, 2151:4, 2217:1 versus ^[3] - 2118:25, 2119:2, 2124:9 via ^[10] - 2085:22, 2100:20, 2119:18, 2119:19, 2141:17, 2143:20, 2172:6, 2185:4, 2215:6, 2227:4 video ^[4] - 2115:7, 2117:11, 2136:7, 2136:8 view ^[4] - 2149:18, 2240:12, 2240:15, 2240:19 View ^[5] - 2085:23, 2085:24, 2086:14, 2086:15, 2086:16 viewing ^[1] - 2170:2 violent ^[1] - 2227:17 virtually ^[1] - 2076:19 visible ^[2] - 2157:1, 2195:5 visual ^[1] - 2079:23 voice ^[2] - 2100:10, 2115:19 voltage ^[1] - 2107:10 volume ^[1] - 2187:18 VOLUME ^[1] - 2076:2 Volume ^[1] - 2218:5 voluminous ^[1] - 2207:3</p>
---	---	---

W		2146:21, 2148:19, 2157:6, 2161:24, 2163:11, 2164:1 yourself [1] - 2135:20
<p>wait [2] - 2138:25, 2148:24 waiving [2] - 2230:18, 2231:25 walk [4] - 2164:19, 2165:18, 2179:17, 2221:17 walking [1] - 2203:20 walks [1] - 2123:5 wants [1] - 2104:2 Warner [2] - 2101:15, 2102:8 was.. [1] - 2230:15 wav [4] - 2196:25, 2197:1, 2200:9, 2200:10 wave [2] - 2181:16, 2187:17 wax [1] - 2208:21 ways [3] - 2093:25, 2096:3, 2117:4 Web [5] - 2103:11, 2103:12, 2104:3, 2104:4, 2104:12 Wednesday [2] - 2241:3, 2241:5 week [3] - 2081:7, 2154:4, 2225:16 weekend [4] - 2227:20, 2228:4, 2228:14, 2240:24 welcome [3] - 2080:21, 2130:11, 2180:16 well-known [6] - 2207:23, 2209:2, 2215:3, 2215:9, 2216:25, 2218:20 whatnot [1] - 2209:24 wheel [7] - 2125:22, 2125:25, 2126:23, 2127:4, 2127:10, 2127:14, 2235:2 whereas [2] - 2096:20, 2127:18 wherein [1] - 2160:8 whole [4] - 2096:23, 2102:14, 2188:25, 2192:9 Wicker [131] - 2079:21, 2080:3, 2080:12, 2081:3, 2083:8, 2083:22, 2085:4, 2089:11, 2095:23, 2096:4, 2097:1, 2097:16, 2100:3, 2100:7, 2100:13, 2101:20, 2103:15, 2104:15, 2104:20, 2106:13, 2109:23, 2110:7, 2110:17, 2113:2, 2115:1, 2115:10, 2118:4, 2118:9, 2118:24, 2120:2, 2120:12, 2120:23, 2121:3, 2121:13, 2122:7, 2123:18, 2124:6, 2124:23, 2125:2, 2125:9, 2126:13, 2126:20, 2128:15, 2129:8, 2129:11, 2130:12, 2131:1, 2131:6, 2131:14, 2131:16, 2132:12, 2135:13, 2136:2, 2136:13, 2137:11, 2138:1, 2138:5, 2138:11, 2139:15, 2140:17, 2141:11, 2145:13, 2145:19, 2146:11, 2148:19, 2149:6, 2149:25, 2151:23, 2153:22, 2155:3, 2155:17, 2156:2, 2157:12, 2162:1, 2163:19, 2165:17, 2167:6, 2168:16, 2169:20, 2170:18, 2172:12, 2172:16, 2172:20, 2173:3, 2174:6, 2174:15, 2175:2, 2175:12, 2176:6, 2177:19, 2178:6, 2178:10, 2180:18, 2182:1, 2182:10, 2184:6, 2185:12, 2189:25, 2190:24, 2193:19, 2195:12, 2196:15, 2198:8, 2199:4, 2199:18, 2200:15,</p>	<p>2200:22, 2201:12, 2203:10, 2205:12, 2206:1, 2206:14, 2207:13, 2207:25, 2210:6, 2210:9, 2211:8, 2213:8, 2214:8, 2214:11, 2215:15, 2217:8, 2217:15, 2217:24, 2219:10, 2219:19, 2221:9, 2222:18, 2226:17, 2226:22, 2229:18 WICKER [1] - 2081:1 Wicker's [1] - 2241:9 winding [1] - 2229:3 windows [1] - 2137:10 Windows [29] - 2177:12, 2177:13, 2180:7, 2182:6, 2183:18, 2183:20, 2183:21, 2183:23, 2184:25, 2185:2, 2185:3, 2185:14, 2186:8, 2186:10, 2186:11, 2186:12, 2189:11, 2191:24, 2193:20, 2194:1, 2200:19, 2200:20, 2200:24, 2201:1, 2203:14, 2204:14, 2204:15, 2206:9, 2206:10 wired [1] - 2121:24 wish [3] - 2076:17, 2082:16, 2120:19 wishes [1] - 2200:10 withdraw [1] - 2109:14 witness [6] - 2148:10, 2148:12, 2148:14, 2227:11, 2229:5, 2231:8 WITNESS [10] - 2080:7, 2080:10, 2080:18, 2100:11, 2104:18, 2131:2, 2149:1, 2213:18, 2213:21, 2229:16 witness' [2] - 2149:16, 2149:17 witnesses [1] - 2241:1 wondering [1] - 2230:7 word [8] - 2098:11, 2111:17, 2139:23, 2163:16, 2163:18, 2228:6, 2228:9, 2231:7 words [11] - 2084:7, 2101:18, 2117:10, 2127:22, 2158:11, 2158:12, 2208:16, 2216:22, 2220:14, 2221:7, 2225:14 works [5] - 2091:1, 2105:24, 2122:22, 2163:25, 2186:11 workstation [1] - 2172:5 workstations [2] - 2142:5, 2142:13 world [4] - 2101:13, 2102:2, 2102:5, 2102:14 worldwide [1] - 2102:12 worries [1] - 2202:6 worse [1] - 2123:12 wrapping [1] - 2230:6 write [3] - 2103:17, 2127:8 writing [1] - 2150:10 written [4] - 2105:20, 2119:6, 2186:12, 2230:15</p>	
	Y	
	<p>year [2] - 2138:18, 2178:23 years [2] - 2208:24, 2209:25 yesterday [25] - 2076:7, 2078:3, 2081:6, 2083:20, 2097:17, 2111:23, 2113:16, 2113:18, 2132:14, 2132:16, 2136:4, 2137:4, 2138:3, 2138:5, 2141:5, 2142:5, 2144:4, 2144:21, 2146:8,</p>	